



Botrytis/Sclerotinia Resources and Tools

BSPGW, Sept 17th, 2011



J. Amselem, N. Lapalu

ALIMENTATION AGRICULTURE ENVIRONNEMENT



Questions / tools



- Get Info on a specific gene :
 - Genome Report System
- Get Info on a set of genes:
 - BioMart
- Combine data from several sources:
 - Galaxy
- Gene Ontology Analysis:
 - Blast2GO
- Blast environment and further analysis
 - Mobyle Blast
 - Mobyle Blast-Koriviewer
 - SRS







Get Info on a specific gene : Genome Report System





Eurgi

Genome Report System

Access to Reports

Leptosphaeria maculans

<u>Botrytis cinerea T4</u> <u>Sclerotinia sclerotiorum</u> <u>Botrytis cinerea B0510</u>

GNP CURGI GNP

Genome Report System - copyright INRA 2011

http://urgi.versailles.inra.fr/grs





· submit PalmitoyItransferase to show genes matching with public or private database entries defined as PalmitoyItransferase



Genome Report System - copyright INRA 2011





submit PF01529 to show genes sharing this PFAM domain

· submit PalmitoyItransferase to show genes matching with public or private database entries defined as PalmitoyItransferase



Genome Report System - copyright INRA 2011



GO term description

JRGI







13 elements (out of 13) are directly linked to the current term.

GO:0005261 : cation channel activity

Identifier BofuT4_P015570.1 BofuT4_P036480.1 BofuT4_P042940.1 BofuT4_P064350.1 BofuT4_P068270.1 BofuT4_P072600.1 BofuT4 P083030.1 BofuT4_P087510.1 BofuT4_P096110.1 BofuT4 P117450.1 BofuT4_P123040.1 BofuT4_P129290.: BofuT4_P141740.1

Gene Products

GO term:

GO:0015085 : calcium ion transmembrane transporter activity

GO:0015094 : lead ion transmembrane transporter activity 💁 🚺 GO:0015095 : magnesium ion transmembrane transporter activity I GO:0042888 : molybdenum ion transmembrane transporter activity GO:0015079 : potassium ion transmembrane transporter activity GO:0015081 : sodium ion transmembrane transporter activity GO:0046915 : transition metal ion transmembrane transporter activity

List of genes sharing this term







couldn's gono name			
BofuT4_	Envoyer		-
BofuT4_P000020.1			
BofuT4_P000030.1	p find a Gene, example: Botul 4_P000	Gene request form :	
BofuT4_P000040.1			
BofuT4_P000050.1	-		
BofuT4_P000070.1		Auto complete form	
BofuT4_P000080.1	upo the CoolS portal and The Duild vi		n InterBre entries BEAM demains
BofuT4_P000090.1	use the <u>Gripis portai</u>		n, interpro entries, PFAM domains
BofuT4_P000100.1			
BofuT4_P000110.1			

• submit PalmitoyItransferase to show genes matching with public or private database entries defined as PalmitoyItransferase









Genome Report System - copyright INRA 2011













<u>Fichier Édition Affichage H</u>istorique <u>Marque-pages Outils Aide</u>

EURGI

• •

	UNI 000	13001	14939	390	31.00	33.23	ıı/a	protein translation 391 aa
im4_B0510_genes	BC1G_08767.1	13759	13964	150	100.00	100.00	n/a	n/a
im4_SS_genes	SS1G_08618.1	13607	14962	1164	86.37	97.08	n/a	n/a
lastn_b0510_supercontig	B0510_supercontig_1.58	8080	13993	255615	99.93	n/a	n/a	n/a
	SS_supercontig_1.11	14453	14671	1419214	85.84	n/a	n/a	n/a
lastn_SS_supercontig	SS_supercontig_1.11	14888	14962	1419214	93.33	n/a	n/a	n/a
	SS_supercontig_1.11	13584	14375	1419214	85.98	n/a	n/a	n/a
	botrytisP00036521	13681	13740	60	n/a	n/a	n/a	array_gene:Boful74_P000070_1. max_over_threshold:46.59.min_over_threshold:7.63. percent_hyb_over_threshold:100.flag_cross_hyb_gene:0 .flag_cross_hyb_organism:0
	botrytisP00036523	13687	13746	60	n/a	n/a	n/a	array_gene:Bofuī4_P000070_1.max_over_threshold:45.1 .min_over_threshold:6.17. percent_hyb_over_threshold:100.flag_cross_hyb_gene:0 .flag_cross_hyb_organism:0
	botrytisP00036524	13693	13752	60	n/a	n/a	n/a	array_gene:BofuT4_P000070_1. max_over_threshold:42.49 .min_over_threshold:8.48 . percent_hyb_over_threshold:100 .flag_cross_hyb_gene:0 .flag_cross_hyb_organism:0
	botrytisP00036525	14016	14075	60	n/a	n/a	n/a	array_gene:BofuT4_P000070_1. max_over_threshold:114.23.nmi_over_threshold:21.77. percent_hyb_over_threshold:100.flag_cross_hyb_gene:0 .flag_cross_hyb_organism:0
olat_oligo	botrytisP00036526	14167	14226	60	n/a	n/a	n/a	array_gene:BofuT4_P000070_1 . max_over_threshold:161 . min_over_threshold:31.05 . percent_hyb_over_threshold:100 . flag_cross_hyb_gene:0 . flag_cross_hyb_organism:0
	botrytisP00036527	14354	14494	60	n/a	n/a	n/a	array_gene:BofuT4_P000070_1. max_over_threshold:33.22. min_over_threshold:15.55. percent_hyb_over_threshold:100. flag_cross_hyb_gene:0 . flag_cross_hyb_organism:0
	botrytisP00036528	14618	14741	60	n/a	n/a	n/a	array_gene:BofuT4_P000070_1. max_over_threshold:124.12.nnin_over_threshold:35.69. percent_hyb_over_threshold:100.flag_cross_hyb_gene:0 .flag_cross_hyb_organism:0
	botrytisP00036529	14765	14824	60	n/a	n/a	n/a	array_gene:BofuT4_P000070_1. max_over_threshold:147.06.nmi_over_threshold:31.08. percent_hyb_over_threshold:100.flag_cross_hyb_gene:0 .flag_cross_hyb_organism:0
	botrytisP00036530	14789	14848	60	n/a	n/a	n/a	array_gene:BofuT4_P000070_1. max_over_threshold:109.51.min_over_threshold:20.36. percent_hyb_over_threshold:100.flag_cross_hyb_gene:0 flag_cross_hyb_organism:0

🕂 Current manual annotation

Ortholog

Analysis Specie Link sclero SS1G_08618.1 ortho bofub0510 BC1G_07770.1

Orthologs



Functional edition access



🛛 🖀 💫 http://urgi.versailles.inra	a.fr/grs/grs.Gene.search?reportID=bt	:4R&objectID=BofuT4P90000033001#.		✓ Google
Eurgi				
Homepage	GnpGenome	FunAnnot Browser	Blast	Downloads
	Botryti	s cinerea T4 GR	5	
	Func	ctional annotation		
	i une	BofuT4P90000033001		
Gene Identifier				
DbXrefs				
Domain/Motif (Interproscan results)				
Localization / Targeting				
Predicted function				
Blast based analysis				
Other analysis				
Functional Gbrowse				
Structural Gbrowse	anually cur	ated gene: acc	cess to fu	nction
	MIIMMII VMI			



Genome Report System



Functional edition access



and a	Le site http://urgi.versailles.inra.fr demande un nom d'utilisateur et un mot de passe. Le site indique : « URGI »
Utilisateur :	nlapalu
Mot de passe :	••••••
	Annuler CK

Authenticated access





Eichier Editio <u>n</u>	Affichage Historique	Marque-pages Qutils Aide //urgi.versailles.inra.fr/grs/editionBt4.htm?reportID=bt4E&objectID=BofuT4P90000033001#.	्रि 🗸 Google
ξ) GRS - Genon	ne Report Syst 💥 🏹	GRS - Genome Report Syst 🗶	
	+ Ortholog		
	🕂 Current manual anno	tation	
	Functional edition		
	Gene ID:	BofuT4P90000033001	
	Gene Name:		
	Synonym:	BofuT4_uP139390.1 BofuT4P194213939001 BofuT4P1942139390001 BofuT4P90000033001	
	PMID:		
	Functional validation status	● Not validate ○ Validate	
	Evidence Code :	IDA Delete >>	nce Code: o://www.geneontolog
	Gene function:		
	Comments:	.org	g/GO.evidence.shtml
		Search ontology by term or ID (for this enter only number) : Add	
	Gene Ontology:	< Add < Add all Delete >> Delete all >>	
	Submit Cancel		



🔶 ~ 🔁 🔕 🖀 💫	ttp://urgi.versailles.inra.fr/grs/editionBt4.htm?reportID=bt4E&objectID=BofuT4P90000033001#.	Gr Google
RS - Genome Report Syst 💥	Σ, GRS - Genome Report Syst 🕱	
+ Current manual a	notation	
Functional edition	inotation	
Gene ID: Gene Name: Synonym: PMID: Functional validat status Evidence Code : Gene function: Comments:	BofuT4P90000033001	ence Code: tp://www.geneontolog rg/GO.evidence.shtml
Gene Ontology:	Search ontology by term or ID (for this enter only number) : Add Add Control of the second secon	
Submit Cance		
Gene prediction a	t gene locus	



Edition Summary page





RGI

Edition Help



Eichier Édition Affichage Historique Marque-pages Qutils Aide	Edition Help	
 	bortID=bt4E&objectID=BofuT4P90000033001#. ☆ v Google	
+ Blast based analysis + Other analysis		
+ Genome Mapping at gene locus		
+ Current manual annotation		
 Functional edition Gene prediction at gene locus Analysis Type ID Start End 		
egn5_orf polypeptide <u>Bofuīt4_uP139390.1</u> 487784 488004 = TreeView	Help:	
□ ■ GO:0002610 : biological adhesion □ ■ GO:0002610 : biological regulation □ ■ GO:0002906 : cell killing □ ■ GO:0002906 : cell killing □ ■ GO:0002907 : cellular process □ ■ GO:0002502 : developmental process □ ■ GO:000251234 : establishment of localization □ ■ GO:000276 : growth □ ■ GO:000276 : inmune system process □ ■ GO:000179 : localization □ ■ GO:000176 : incalization	 Co-located gene predictions GO tree 	
Co:0051235 : maintenance of localization Co:0008152 : metabolic process Co:0008152 : multi-organism process Co:0051704 : multi-organism process Co:0023501 : multicellular organismal process Co:0043473 : pigmentation Co:0002414 : reproduction CO:0022414 : reproductive process CO:0050896 : response to stimulus CO:0050896 : response to stimulus CO:0016032 : viral reproduction CO:00067676 - white reproduction		

1 GO:0003674 : molecular_function

Genome Report System - copyright INRA 2011





Get Info on a set of genes: Biomart





biomart version 0.7



BioMart





chier Éditio <u>n A</u> ffichage <u>H</u> is	orique <u>M</u> arque-pages <u>O</u> utils Aid <u>e</u>	
GnpIS &	dvanced search	L C Google
🕽 New 🔲 🖬 Count 📗 Res	ults	🐈 URL 🔂 XML 🛃 Per
ataset otrytis_functional_annota Filters	GnpGenome Botrytis cinerea T4, genes annotation Botrytis_functional_annotation \$	\$
Attributes Reference Feature Feature Type Start (-1) End Program Library HIT Description Analysis source name DB Xref DB DB Xref Accession Ontology Term		









BioMart





<u>F</u> ichier Éditio <u>n</u> <u>A</u> ffichage <u>H</u> istoriqu	ue <u>M</u> arque-pages <u>O</u> utils Aid <u>e</u>	÷
🔶 🖌 🔁 😂 🖀 💫	nttp://urgi.versailles.inra.fr/biomart/martview/f5a53b0c0c0331355249949e53434e23	🖾 🗸 Google 🔍
GnpIS adva	anced search	
New 🖩 Count 📄 Results		🗙 URL 🛃 XML 🛃 Perl 🔞 Help
Dataset 13 / 366639 Entries	t for the query with any filters applied Please restrict your	query using criteria below
Botrytis_functional_annotation	🗆 Feature	
Filters Feature Type : polypeptide Ontology Term (% for wildcard). Example: %kinase% : metal%ion%transmembrane	□ Reference Feature (% for Wildcard). Example: BofuT4_P0001%	Parcourir
Attributes Reference Feature Feature Type	☑ Feature Type	match polypeptide polypeptide_domain signal_peptide
End Program Library HIT Description	□ Feature Name (% for wildcard). Example:BofuT4_P009%	Parcourir
DB Xref DB DB Xref Accession Ontology Term	 Feature Location Start < Start > End < End > 	
	□ HIT (% for wildcard). Example: 3b95_%	Parcourir
	□ Description (% for wildcard). Example: %Euchromatic%	
	🗹 Ontology Term (% for wildcard). Example: %kinase%	metal%ion%transmembrar
	🗆 Program	FPRINTScan \$

BioMart



	http://urgi.versailles.inra.fr/biomart/martview/f5a53b0c0c0331355249949e53434e23	ि Google
GnpIS ad	ranced search	
Count Resul	Int for the query with any filters applied	TURL MARKEN MEL MARKEN MEL
Dataset 13 / 366639 Entries		
Filters Feature Type : polypeptide Ontology Term (% for wildcard). Example: %kinase% :	□ Feature □ Reference Feature (% for Wildcard). Example: BofuT4_P0001%	
metal%ion%transmembran		Parcourir
Metal%ion%transmembran Attributes Reference Feature Feature Type Start (-1)	In Feature Type	atch Alypeptide Admain and Alypeptide Admain
Attributes Reference Feature Feature Type Start (-1) Filters: - Type : pc - GO term	Preature Type Plypeptide : metal%ion%transmembrane	atch hypeptide hypeptide_domain gnal_peptide

BioMart



JRGI					F	Re	S	ult	S			Bic	
er Éditio <u>n</u> <u>A</u> ffichage <u>H</u> istoriqu	ue <u>M</u> arque-pages <u>O</u>	utils Aid <u>e</u> a fr/biomart/ma	rtview/f5a	5360c0c0	3313552	19919-53	13/10	23				: Google	
GnpIS adva	nced search	Resu 13 pc	ilts olyp	: ept	tide	es						L NML 2 Perl O Help	
aset 13 / 366639 Entries	Export all results	s to	[ile				⇒ TS	v ᅌ 🗆 Uniqu	e results on	ly 🥝 Go		
ytis_functional_annotation	Email notification	to											
ature Type : polypeptide	View												
tology Term (% for dcard). Example: dcard().	Reference	Feature	Start	End P	rogram	Library	ніт	Description	Analysis	DB Xref	DB Xref	Ontology Term	
ital%ion%transmembrane	BofuT4_P015570.1	polypeptide	0	636 bl	ast2go				source name	GFF_source	general_info	metal ion transmembrane	
ference Feature	BofuT4_P036480.1	polypeptide	0	305 bl	ast2go					GFF_source	general_info	metal ion transmembrane	
ature Type rt (-1)	BofuT4_P042940.1	polypeptide	0	444 bl	ast2go					GFF_source	general_info	metal ion transmembrane transporter activity	
d	BofuT4_P064350.1	polypeptide	0	485 bl	ast2go					GFF_source	general_info	metal ion transmembrane transporter activity	
rary	BofuT4_P068270.1	polypeptide	0	404 bl	ast2go					GFF_source	general_info	metal ion transmembrane transporter activity	
scription	BofuT4_P072600.1	polypeptide	0	549 bl	ast2go					GFF_source	general_info	metal ion transmembrane transporter activity	
alysis source name Xref DB	<u>BofuT4_P083030.1</u>	polypeptide	0	469 bl	ast2go					GFF_source	general_info	metal ion transmembrane transporter activity	
Xref Accession	BofuT4_P087510.1	polypeptide	0	369 bl	ast2go					GFF_source	general_info	metal ion transmembrane transporter activity	
	BofuT4_P096110.1	polypeptide	0	239 bl	ast2go					GFF_source	general_info	metal ion transmembrane transporter activity	
	BofuT4_P117450.1	polypeptide	0	405 bl	ast2go					GFF_source	general_info	metal ion transmembrane transporter activity	
	BofuT4_P123040.1	polypeptide	0	747 bl	ast2go					GFF_source	general_info	metal ion transmembrane transporter activity	
	<u>BofuT4_P129290.1</u>	polypeptide	0	953 bl	ast2go					GFF_source	general_info	metal ion transmembrane transporter activity	
	D-6-TA D1417401	nobroantida	0	634 bl	ast2do					GEE SOURCE	general info	metal ion transmembrane	

biomart version 0.7



Attributes: limit result



biomart version 0.7

URGI





Attributes: limit result

ξ, Galaxy 💥				
nced search				
			🔶 URL 🔤 XML	🛃 Pe
Export all results to	File	In XIS In ▼ Unique results		
Email potification to				
Email notification to				
View		ique results oply		
		ique results of hy		
Reference Feature	Ontology Term Feature Typ	pe Program		
BofuT4_P015570.1 metal ion trans	smembrane transporter activity polypeptide	blast2go		
BofuT4_P036480.1 metal ion trans	smembrane transporter activity polypeptide	blast2go		
BofuT4_P042940.1 metal ion trans	membrane transporter activity polypeptide	blast2go		
BofuT4_P064350.1 metal ion trans	smembrane transporter activity polypeptide	blast2go		
Boful4_P068270.1 metal ion trans	smembrane transporter activity polypeptide	blast2go		
BofuT4_P072600.1 metal ion trans	smembrane transporter activity polypeptide	blast2go		
BofuT4 P087510.1 metal ion trans	smembrane transporter activity polypeptide	blast2go		
BofuT4_P096110.1 metal ion trans	smembrane transporter activity polypeptide	blast2go		
BofuT4_P117450.1 metal ion trans	smembrane transporter activity polypeptide	blast2go		
BofuT4_P123040.1 metal ion trans	smembrane transporter activity polypeptide	blast2go		
BofuT4_P129290.1 metal ion trans	smembrane transporter activity polypeptide	blast2go		
BofuT4 P 3740.1 metal ion trans	smembrane transporter activity polypeptide	blast2go		
	Z, Galaxy X nced search Export all results to Email notification to View Reference Feature Bofu14_P015570.1 metal ion trans Bofu14_P036480.1 metal ion trans Bofu14_P08270.1 metal ion trans Bofu14_P08270.1 metal ion trans Bofu14_P083030.1 metal ion trans Bofu14_P083030.1 metal ion trans Bofu14_P083030.1 metal ion trans Bofu14_P083030.1 metal ion trans Bofu14_P08270.1 metal ion trans Bofu14_P083030.1 metal ion trans Bofu14_P1230.1 metal ion trans Bofu14_P12300.1 metal ion trans	∠, Galaxy × nced search Export all results to Email notification to View 50 < rows as HTML < ✓ Un	Export all results to File Image: XLS Image: XL	Image: Search Image: Search <t< td=""></t<>

biomart version 0.7



BioMart







URGI	BioMart	
<u>F</u> ichier Éditio <u>n</u> <u>A</u> ffichage <u>H</u> istorio	ue <u>M</u> arque-pages <u>O</u> utils Aid <u>e</u>	
🗭 👻 🔂 🖉 🏝	1ttp://urgi.versailles.inra.fr/biomart/martview/f5a53b0c0c0331355249949e53434e23	☆ 🖍 Google
GnpIS adv	anced search	
🤉 New 📕 Count 📗 Result		👷 URL 🔤 XML 🔮 Peri 🔞 He
Datacat 47/266620 Entring	Export all results to File	nique results only 🛛 🚱 🗛
Botrytic functional apportation	Empil patification to HTML	
Filters	CSV	
Optology Tarpa (% for		
Untology Term (% for wildcard) Example:		
%kinase% :	Reference Feature Ontology Term Feature Type Program	
metal%ion%transmembrane	BofuT4 P015570.1 metal ion transmembrane transporter activity polypeptide blast2go	
Feature Type :	BofuT4_P036480.1 metal ion transmembrane transporter activity polypeptide blast2go	
polypeptide,polypeptide_don	BofuT4_P042940.1 metal ion transmembrane transporter activity polypeptide blast2go	
Attributes	BofuT4_P064350.1 metal ion transmembrane transporter activity polypeptide blast2go	
Reference Feature	BofuT4_P068270.1 metal ion transmembrane transporter activity polypeptide blast2go	
Ontology Term	Bofult4_P072600.1 metal ion transmembrane transporter activity polypeptide blast2go	
Feature Type	BofuT4_P085030.1 metal ion transmembrane transporter activity polypeptide blast2go	
Program	BofuT4_P096110.1 metal ion transmembrane transporter activity polypeptide blast2go	
	BofuT4_P1	
	Bofura P Bofura P Bofura P Bofura P Bofura P Bofura P Bofura P Bofura P Bofura P Bofura P	HTML,CSV,EXCEL)
	Bofut4_P(
	Boful4_P4 Boful4_P0 Boful4_P055370.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Boful4_P054370.1	
	Boful4_P4 Boful4_P4 Boful4_P0 Boful4_P055370.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Boful4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Boful4_P068270.1 metal ion transmembrane transporter activity polypeptide_domain	
	Boful4_P4 Boful4_P0 Boful4_P055370.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Boful4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Boful4_P068270.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Boful4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain	
	Boful4_P0 Boful4_P0 Boful4_P0 Boful4_P055370.1 metal ion transmembrane transporter activity polypeptide_domain Boful4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain Boful4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain Boful4_P068270.1 metal ion transmembrane transporter activity polypeptide_domain Boful4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain Boful4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain Boful4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain	
	Boful4_P0 Boful4_P0 Boful4_P055370.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Boful4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Boful4_P068270.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Boful4_P072600.1 metal ion transmembrane transporter activity Boful4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Boful4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Boful4_P075720.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam	
	Bofult4_PG Bofult4_PG Bofult4_P055370.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P064250.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P072600.1 metal ion transmembrane transporter activity Bofult4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P075720.1 metal ion transmembrane transporter activity Bofult4_P083030.1 metal ion transmembrane transporter activity Bofult4_P083030.1	
	Bofult4_P0 Bofult4_P0 Bofult4_P06 Bofult4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P072600.1 metal ion transmembrane transporter activity Bofult4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain Bofult4_P075720.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P087350.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P087350.1 metal ion transmembrane transporter activity polypeptide_domai	
	Bofult4_p0 Bofult4_P0 Bofult4_P06 Bofult4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain Bofult4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain Bofult4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain Bofult4_P075720.1 metal ion transmembrane transporter activity polypeptide_domain Bofult4_P087510.1 metal ion transmembrane transporter activity polypeptide_domain Bofult4_P087510.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P087510.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P087510.1 metal ion transmembrane transporter activity polypeptide_domain <td></td>	
	Bofult4_P0 Bofult4_P0 Bofult4_P06 Bofult4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P072600.1 metal ion transmembrane transporter activity Bofult4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain Bofult4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P083030.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P087510.1 metal ion transmembrane transporter activity Bofult4_P087510.1 metal ion transmembrane transporter activity polypeptide_domain HMMPanther Bofult4_P08751	
	Bofult4_P0 Bofult4_P0 Bofult4_P06 Bofult4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P064350.1 metal ion transmembrane transporter activity polypeptide_domain HMMPfam Bofult4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain Bofult4_P072600.1 metal ion transmembrane transporter activity Bofult4_P072600.1 metal ion transmembrane transporter activity polypeptide_domain Bofult4_P072600.1 metal ion transmembrane transporter activity Bofult4_P075720.1 metal ion transmembrane transporter activity polypeptide_domain Bofult4_P08750.1 metal ion transmembrane transporter activity Bofult4_P087510.1	







Combine data from several sources: Galaxy





Galaxy





ichier Édition Affichage Historique Marque-pages Outils Aid <u>e</u>								
🗧 🔶 👻 😂 😣	4 Exi http://urgi.versailles.inra.fr/GnpArray/transcriptome/geneListAction.do			eneListAction.do		☆ 🗸 Google		Q
🕽 Galaxy	💥 💈 GnpIS	- URGI	💥 🕺 URGI - G	ene list results	×			```
EURGI	Gene lis	t resu	llts					INRA
Log in	Results							
My basket 0 item(s)					Get Data from GnpArray:			
Main	Number of unique repo	Number of unique reporters in your query: 211						
Global queries	Number of unique genes in your query: 35690				dc	ownload up-regulated Botrytis		
Queries	I≪ <> ≫I 9 items found, displaying 1 to 9 Display 10 ♀ results per page			s per page		denes		
 Projects Experiments Hybridizations 	# Gene list name	Creation date	Description	Proje		gonoo	porter nalized lata	Gene normalized data
Array designs Protocols Process Gene lists Documentation	Bc2 In planta <u>Down (Botrytis-</u> 1 <u>Arabidopsis</u> interaction) (113 reporters)	2005/04/15	Variance analysis wa <u>> more</u>	INRA AFC	<u>BBC</u>	STUDY OF BOTRYTIS CINEREA T4-ARABIDOPSIS THADANA COLO INTERACTION 🤍 Down regulated	<u>س</u> ام	
User guide FAQ GnpArray news Release notes	2 (Botrytis- interaction) (32 reporters)	2005/04/15	Expression values of <u>> more</u>	INRA AFC	<u>BBC</u>	STUDY OF BOTRYTIS CINEREA T4-ARABIDOPSIS THALIANA COLO INTERACTION 🤍 Up regulated	🛃 I 🔍	
Data submission GnpIS Ephesis GnpGenome GnpMap CnpProt	Bc1 In planta Up (Botrytis- 3 Arabidopsis interaction) (98 reporters)	2005/04/15	Variance analysis wa <u>> more</u>	INRA AFC	<u>GBC</u>	STUDY OF BOTRYTIS CINEREA T4-ARABIDOPSIS THALIANA COLO INTERACTION 🔍 regulated	⊠ ।Q	
GnpSeq GnpSNP Siregal Synteny	4 <u>Bc1 - In planta Up</u> (Botrytis-B0510 : in vitro vs in planta[sunflower] <u>48h</u> (277 genes)	2009/03/09	Variance analysis wa <u>> more</u>	<u>Botrytis on Sunf</u>	lower 2008	STUDY OF BOTRYTIS-SUNFLOWER INTERACTION Q Up regulated		
	5 (Botrytis-B0510 : in planta[sunflower] 48h) (306 genes)	2009/03/09	Variance analysis wa <u>> more</u>	<u>Botrytis on Sunf</u>	lower 2008	STUDY OF BOTRYTIS-SUNFLOWER INTERACTION 🔍 Down regulated		

Galaxy



Load Data in Galaxy



Fichier Édition Affichage Historique Margue-pages Outils Aide									
	Get Data :								
Z, Galaxy X Z, URGI - Gene list results X									
- Galaxy Analyze Data Work									
Tools Options - Upload File									
Get Data									
Upload File from your computer Auto-detect	empty. Click 'Get Data'								
UCSC Main table browser Which format? See help below	e to start								
UCSC Test table browser ICSC Archaea table browser File:									
DOESC Attriage table browser									
Cost Miarabid Bote TIP: For NGS and other large files (>~2GB), uploading via HTTP/FTP URL (below) is	the most reliable method.								
BioMart Cantral server									
BinMart INPA LIPGI Gnois									
CBI Rice Mart rice mart									
■ GrameneMart Central server									
modENCODE fly server									
Flymine server									
Flymine test server Convert spaces to tabs:									
<u>modMine</u> server Use this option if you are entering intervals by hand.									
Ratmine server Genome:									
<u>modENCODE worm</u> server Click to Search or Select									
<u>Wormbase</u> server Execute									
<u>Wormbase</u> test server									
EuPathDB server Auto-detect									
EncodeDB at NHGRI The system will attempt to detect Axt, Fasta, Fasta, Solary and Solary a	ular, Wiggle, Bed and Interval (Bed with headers) formats. If your file is not detected properly as								
EpiGRAPH server one of the known formats, it most likely means that if has some format problems (e.g. the format you think it should be. You can also upload compressed files, which will au	, unierent number of columns on unierent rows). You can still coerce the system to set your data to to the set of the system to set your data to the set of the set o								
EpiGRAPH test server									
HbVar Human Hemoglobin Ab1 Variants and Thalassemias									
Send Data A binary sequence file in 'ab1' format with a 'ab1' file extension. You must manually se	elect this 'File Format' when uploading the file.								
ENCODE Tools Axt									
Lift-Over Text Maniard effort	ies: a summary line and 2 sequence lines. Blocks are separated from one another by blank lines.								
The summary line contains chromosomal position and size information about the alig	prment. It consists of 9 required fields.								
Unix Tools Bam									
Join, Subtract and Group A binary file compressed in the BG7E format with a 'ham' file extension									
Convert Formats									







Eichier Édition Affichage Historique Marque-pages Qutils Aide							
🛊 👻 😫 🖀 🖏 http://urgi.versailles.inra.fr/galaxy/							
Σ) Galaxy 🗙	🖏 URGI - Gene list results 🛛 💥		~				
🗧 Galaxy	Analy	alyze Data Workflow Shared Data Help User					
 È, Galaxy Cols Options → Get Data Upload File from your computer UCSC Main table browser UCSC Archaea table browser BioMart Central server BioMart INRA URGI Gnpls CBI Rice Mart rice mart GrameneMart Central server modENCODE thy server Flymine server Ratmine server Ratmine server Wormbase test server Wormbase test server EureAthDB server EncodeDB at NHGRI EpiGRAPH test server EpiGRAPH test server HbVar Human Hemoglobin Variants and Thalassemias 	Construction Construction Reporter name Sequence db ID FOLD CHANGE pVALU B48c_116_249_009 B48c_116_249_009 8.0 B58c_116_281_B07 B58c_116_281_B07 8.0 B58c_116_281_B07 B58c_116_281_B07 1.7 1.424435-6 BC16_00109.1 BC16_00109.1 1.7 1.424435-6 BC16_03803.1 BC16_03803.1 29.0 1.299432E-6 BC16_04307.1 BC16_05330.1 4.3 1.193244E-6 BC16_05330.1 BC16_05859.1 4.6 1.015448E-6 BC16_06588.1 BC16_05859.1 6.6 1.015448E-6 BC16_06588.1 BC16_05859.1 6.8 7.06185E-7 BC16_06588.1 BC16_0595.1 6.8 7.06185E-7 BC16_07338.1 BC16_05985.1 2.6 1.378184E-6 BC16_07938.1 BC16_05985.1 2.2 2.98815E-6 BC16_12051.1 2.2 2.98815E-6 BC16_1242.1 BC16_1242.1 3.9 2.404327E-6 BC16_12241.1 BC16_12051.1 2.2 <	Alyze Data Worklow Shared Data Help User LUE Normalized_Variance 0.97 0.97 0.97 0.97 0.99 0.94 0.97 0.97 0.97 0.97 0.94 0.97 0.97 0.97 0.97 0.97 0.99 0.98 0.94 0.97 0.97 0.97 0.99 0.98 0.99 0.98 0.95 0.97 0.97 0.91 0.95 0.97 0.97 0.98 0.99	History Options Image: Second S				
Send Data ENCODE Tools Lift-Over Text Manipulation Filter and Sort Unix Tools Join, Subtract and Group Convert Formats	BofuT4_P003870.1 BofuT4_P003870.1 18.0 BofuT4_P003990.1 BofuT4_P003990.1 18.0 BofuT4_P004830.1 BofuT4_P00390.1 18.0 BofuT4_P004830.1 BofuT4_P005160.1 39.0 BofuT4_P005160.1 BofuT4_P005160.1 6.8 BofuT4_P005170.1 BofuT4_P0051510.1 2.7 BofuT4_P005540.1 BofuT4_P006540.1 24.0 BofuT4_P007640.1 BofuT4_P007740.1 13.0 BofuT4_P007740.1 BofuT4_P0078190.1 2.3 BofuT4_P007190.1 BofuT4_P0078190.1 2.3	0 2.209389E-7 0.99 0 1.283808E-6 0.96 0 1.956912E-7 0.99 1.077158E-6 0.98 2.681189E-6 0.88 0 2.941267E-7 0.99 1.087957E-6 0.97 1.82242E-6 0.96 9 539359E-7 0.98	•				

Galaxy




URGI	select lines by text patter	'n	Bioge
Fichier Edition Affichage Historiqu	ie Marque-pages Outris Alde		
– Galaxy 🗶	Analyze Data Workflow Shared Data Help User		
Look Orting			Ontinus
Tools Options -	Select	History	Options v
Set Data	Selectines from		
ENCODE Tools	31: Normalized Data 1 96/3E11 csv/0	31:	@ // s
ift-Over	51. Normalized_Data_1.504JL11.tsv	Normalized_Dat	ta_1.364309886741964
ext Manipulation	that	278 lines, forma	it: tabular, database: <u>?</u>
ilter and Sort	Matching C	Info: uploaded ta	abular file
 Filter data on any column using 	the pattern:		
simple expressions	^BofuT4	1	2 3
 Sort data in ascending or 	here you can enter text or regular expression (for syntax check lower part of this frame)	B4BC_116_249_C09	B4BC_116_249_C09 8.0
descending order	Evente	B5BC_116_281_B07	B5BC_116_281_B07 4.5
 <u>Select</u> lines that metch an overcossion 	LXedde	BC16_00109.1 BC16_00913.1	BC16_00109.1 2.2 BC16_00913.1 1.7
expression	1 TIP: If your data is not TAB delimited use Text Manipulation		0516 01400 1 03.0
GFF			
 <u>Extract features</u> from GFF file 	Svitax Filter and Soft Section :		
 <u>Filter GFF file by attribute</u> using 	The selective expression the definition expression expression		
simple expressions			
Filter GFF file by feature count Using simple expressions	Select lines matching with :		
using simple expressions	What he she beginning of a stringbut not an internal		
nix Tools	• Vi matches a digit, same as [0-9].		
Convert Formete	• S matches a non-oight • Is matches a whitespace character.		
stract Features	S matches anything BUT a whitespace.		
etch Sequences	It matches a tab. Wir matches an alphanumeric character.		
etch Alignments	IWmatches anything but an alphanumeric character.		
Get Genomic Scores	• (_) groups a particular pattern. • V matches the end of a strino(hut not a internal line)		
Operate on Genomic Intervals	 {n or n, or n,m} specifies an expected number of repetitions of the preceding pattern. 		
Statistics	• (n) The preceding item is matched exactly n times.		
Mavelet Analysis	• (h,h) The preceding item is matched at least himes but not more than m times.		
Graph/Display Data	[] creates a character class. Within the brackets, single characters can be placed. A dash (·) may be used to indicate a range such as a-z.		
Regional Variation	matures any single character except a newline. * The preceding item will be matched zero or more times.		
Multiple regression	The preceding item is optional and matched at most once.		
Multivariate Analysis	 + I ne preceding item will be matched one or more times. A has two meaning: - matches the beginning of a line or string indicates negation in a character class. For example. [A] matches every character excent the ones ins 	ide	
Evolution	brackets.		
Metagenomic analyses	S matches the end of a line or string, Separates a timerate possibilities		
NGS: OC and manipulation			
NGS: Indel Analysis	Example		
IGS: SAM Tools	- Abrillo 08.75 x8. usuild matebilises that havin with abramasamas, such as lines in a DED format file	~	



Galaxy

select lines by text pattern





Fichier Édition Affichage Historique Marque-pages Outils Aide



URGI		Cut columns	Biogg
ichier Édition Affichage Historiq	ue <u>M</u> arque-pages <u>O</u> utils Aid <u>e</u> nttp://urgi.versailles.inra.fr/galaxy/		GV Google
		Analyza Data Waddauu Sharad Data Ulala Ulaar	
- Galaxy		Analyze Data worknow Shared Data Help Oser	
Tools Options 👻	Cut		History Options
Get Data			
Send Data	Cut columns:		
NCODE Tools	[c1		32: Select on data 31 228 lines format tabular database:
ift-Over over Meninudation	Delimited by:		Info: Matching pattern: ^BofuT4
Add column to an existing query	Tab 🗘		
	From:	Taxt manipulation section :	
row	32: Select on data 31		
Concatenate queries tail-to-head			8
Cut columns from a table	Execute	Cut morgo nasto convort	
Nerre Columna tegether		out, merge, paste, convert	· · · · · · · · · · · · · · · · · · ·
Merge Columns together	WARNING: This tool breaks column assignments. To		
 <u>Convert</u> delimiters to TAB 	The output of this tool is always in tabular format (e.g.,		
<u>Create single interval</u> as a new	Cutting columns 1 and 3 from:		<u>31.</u> • • • •
Chapte Case of selected	apple.is.good		Normalized_Data_1.3643098867419
columns	windows,is,bad		Info: uploaded tabular file
Paste two files side by side	will give:		
Permove beginning of a file	apple good windows bad		1 2 3
Solost random lines from a file			Reporter name Sequence db ID FOLD (
Selectration mes from a me	What it does		B4BC_116_249_C09 B4BC_116_249_C09 8.0 B5BC_116_281_B07 B5BC_116_281 B07 4.5
Select first lines from a Query	This tool selects (cuts out) specified columns from the da	taset.	BC16_00109.1 BC16_00109.1 2.2
 <u>Select last</u> lines from a Query 	• Columns are specified as c1 , c2 , and so on. Colu	mn count begins with 1	BC16_00913.1 BC16_00913.1 1.7 BC16_01483.1 BC16_01483.1 23.0
 <u>Trim</u> leading or trailing characters 	 Columns can be specified in any order (e.g., c2,c1 	,c6)	<
Filter on ambiguities in	If you specily more columns than actually present -	emply spaces will be lined with dots	
polymorphism datasets	Example		
<u>Arithmetic Operations</u> on tables	Input detect (aix columns: -1, -2, -2, -4, -5,1, -2);		
ilter and Sort	input dataset (six columns, c1, c2, c3, c4, c5, and c6):		
nix Tools	chr1 10 1000 gene1 0 + chr2 100 1500 gene2 0 +		
Convert Formate	cut on columns "c1,c4,c6" will return:		
xtract Features	chrl genel +		
etch Sequences	and an active to the first state of the stat		
etch Alignments	cut on columns "Co,Co,C4,C1" will return:		
Set Genomic Scores	+ 0 gene1 chr1 + 0 gene2 chr2		
Operate on Genomic Intervals	cut on columns "c8,c7,c4" will return:		











Fishian Édition Affichage Historique Marque pages Outile Aide		لاو
A → ✓ A A A A A A A A A A A A A A A		
E Galaxy		· · · · · · · · · · · · · · · · · · ·
Galaxy	Analyze Data Workflow Shared Data Help User	
Tools Options v		History Options -
Ioors Options ♥ Get Data Send Data ENCODE Tools Itributes updated Ift-Over Text Manipulation • Add column to an existing query Compute an expression on every row • Concatenate queries tail-to-head Cut columns from a table • Merge Columns together Convert delimiters to TAB • Create single interval as a new query • Change Case of selected columns • Other Deginning of a file • Select first lines from a file • Select first lines from a Query • Select first lines from a Query • Select first lines from a Query • Select first lines from a Query • Select first lines from a Query • Filter and Sort Unix Tools Join, Subtract and Group Convert Formats Extract Features Fetch Alignments Get Genomic Scores Operate on Genomic Intervals • v	Edit Attributes (click on pen): Give a name to your file.	History Options → History Options → 33: gene Hist



EURGI

Get Info from Biomart



<u>Fichier Édition A</u> ffichage <u>H</u> istoriqu	ue <u>M</u> arque-pages <u>O</u> utils Aid <u>e</u>											
🔶 🖌 😂 🖉 📚	nttp://urgi.versailles.inra.fr/biomart/martview/9ad9a9289d80ee670fd1a35ddd60279a	ක් 🗸 Google 🔍										
Σ _μ Galaxy 🛛 💥	💫 URGI - Gene list results 🛛 🗶 🕺 BioMart - MartView 🗶											
GnpIS adva	anced search	Edit Filters: Paste your gene list										
🤉 New 📗 Count 📗 Results		elp_										
Dataset 968 / 366639	Please restrict y											
Entries	⊟ Feature											
Botrytis_functional_annotatic Filters Reference Feature (% for Wildcard). Example: BofuT4_P0001% : [ID-list specified]	☑ Reference Feature (% for Wildcard). Example: BofuT4_P0001%	BofuT4_uP106990.1 BofuT4_uP127940.1 BofuT4_uP128130.1 BofuT4_uP131510.1 Parcourir										
Feature Type : polypeptide_domain DB Xref DB : DB:PFAM Attributes	☑ Feature Type	match polypeptide polypeptide domain signal_peptide										
Reference Feature Feature Type Start (-1) End Program Libreny	□ Feature Name (% for wildcard). Example:BofuT4_P009%	Parcourir										
HIT Description Analysis source name DB Xref DB DB Xref Accession Ontology Term	 Feature Location Start < Start > End < End > 											
	□ HIT (% for wildcard). Example: 3b95_%	Parcourir										



EURGI



Get Info from Biomart



Fichier Édition Affichage Historique Marque-pages Outils Aide ☆ ✔ Google ٩ 2 http://urgi.versailles.inra.fr/biomart/martview/9ad9a9289d80ee670fd1a35ddd60279a \mathbf{v} 💥 💫 URGI - Gene list results 💥 💈 BioMart - Mart∨iew ~ 氡 Galaxy \times ✓ Feature Type match polypeptide domain polypeptide DB Xref DB : DB:PFAM polypeptide_doma signal peptide Attributes □ Feature Name (% for wildcard). Example:BofuT4 P009% Reference Feature Feature Type Start (-1) End **Edit Filters:** Program Library Feature Location HIT Start < Description Get PFAM domains of Analysis source name Start > DB Xref DB End < selected genes DB Xref Accession Ontology Term End >□ HIT (% for wildcard). Example: 3b95 % Parcourir... Description (% for wildcard). Example: %Euchromatic% □ Ontology Term (% for wildcard). Example: %kinase% Program FPRINTScan 🗘 polypeptide iprscan annotation 🖂 □ Analysis source name polypeptide_vs_Cdd_profiles polypeptide_vs_Kog_profiles polypeptide_vs_kegg polypeptide_vs_pdb ☑ DB Xref DB DB:PIR DB:PRINTS DB:PRODOM DB:PROFILE □ DB Xref Accession (% for wildcard)





biomart version 0.7



Eichier Édition Affichage Historiqu	e <u>M</u> arque-pages <u>O</u> utils ttp://urgi.versailles.inra.fr/	s Aid <u>e</u> /galaxy/	Loa	ad the new file		Google
🕽 Galaxy 🛛 🗙	💫 URGI - Gene list resul	ts 🔀 🖾 🛙	BioMart - Mart∨ie	w X		
🗧 Galaxy			Anal	yze Data Workflow Shared Data Help User		
Get Data C Upload File from your computer UCSC Main table browser UCSC Test table browser UCSC Archaea table browser BX main browser Get Microbial Data BioMart Central server BioMart INRA URGI GnpIs CBI Rice Mart rice mart GrameneMart Central server Flymine server Flymine server Rathine server ModENCODE fly server Plymine server ModENCODE worm server Wormbase server Wormbase test server EuPathDB server EncodeDB at NHGRI EpiGRAPH server EpiGRAPH server HbVar Human Hemoglobin Variants and Thalassemias Send Data ENCODE Tools Lift-Over TextManiputation Filter and Sort Join, Subtract and Group	Bofurt4_P001930.1 Bofurt4_P003870.1 Bofurt4_P003870.1 Bofurt4_P003990.1 Bofurt4_P004830.1 Bofurt4_P004830.1 Bofurt4_P004830.1 Bofurt4_P00540.1 Bofurt4_P00540.1 Bofurt4_P00540.1 Bofurt4_P006540.1 Bofurt4_P007640.1 Bofurt4_P008190.1 Bofurt4_P008190.1 Bofurt4_P008190.1 Bofurt4_P008190.1 Bofurt4_P008190.1 Bofurt4_P00830.1 Bofurt4_P01330.1 Bofurt4_P01330.1 Bofurt4_P01330.1 Bofurt4_P01330.1 Bofurt4_P01330.1 Bofurt4_P01330.1 Bofurt4_P01330.1 Bofurt4_P01330.1 Bofurt4_P012350.1 Bofurt4_P012400.1 Bofurt4_P012400.1	6 198 6 217 3 194 791 819 791 819 731 271 353 601 3 283 269 574 815 846 685 801 90 152 22 444 50 365 34 288 26 86 18 164 986 1118 769 847 761 459 1 83 17 140 34 253 17 282 98 374 571 636 680 920 61 195 239 465 62 232 16 195 239 465 62 232 16 83 <th>PF00857 PF03443 PF06101 PF00734 PF001915 PF00067 PF00732 PF00732 PF00734 PF00734 PF01915 PF00734 PF00735 PF00175 PF00171 PF01301 PF10435 PF02803 PF00657 PF02803 PF00657 PF0250 PF01565 PF03036 PF03235 PF00501 PF00791 PF00550 PF03235 PF00501 PF00793 PF07690 PF03235 PF04119 PF01083 PF07690 PF03235 PF04119 PF01083 PF07690 PF03235 PF04119 PF01083 PF07690 PF03639 PF0360 PF03544 PF0369 PF03544 PF0369 PF03544 PF0369 PF03544 PF0369 PF03544 PF0359 PF0369 PF03544 PF0359 PF0369 PF0359 PF0360 PF0335 PF00067 PF0359 PF03592 PF00067 PF03592 PF00067 PF03593 PF00360 PF00344 PF03443 PF03443 PF03460 PF03460</th> <th>Get Data : Load the Biomart result fil Galaxy</th> <th>le in</th> <th>34: mart_exportixt (*) 34: mart_exportixt (*) 228 lines, format tabular, database Info: uploaded tabular file 2 3 4 Reference Feature Start (-) End OB X Bofurd_P00380.1 6 127 PF03 Bofurd_P004830.1 61 271 PF09 Bofurd_P004830.1 791 819 PF00 Bofurd_P004830.1 791 819 PF00 Bofurd_P004830.1 791 819 PF00 Bofurd_P004830.1 61 271 PF00 228 lines, format tabular, database Info: 33: gene list 228 lines, format tabular, database Info: 32: Select on data 31 31: Normalized Data_1.36430988674</th>	PF00857 PF03443 PF06101 PF00734 PF001915 PF00067 PF00732 PF00732 PF00734 PF00734 PF01915 PF00734 PF00735 PF00175 PF00171 PF01301 PF10435 PF02803 PF00657 PF02803 PF00657 PF0250 PF01565 PF03036 PF03235 PF00501 PF00791 PF00550 PF03235 PF00501 PF00793 PF07690 PF03235 PF04119 PF01083 PF07690 PF03235 PF04119 PF01083 PF07690 PF03235 PF04119 PF01083 PF07690 PF03639 PF0360 PF03544 PF0369 PF03544 PF0369 PF03544 PF0369 PF03544 PF0369 PF03544 PF0359 PF0369 PF03544 PF0359 PF0369 PF0359 PF0360 PF0335 PF00067 PF0359 PF03592 PF00067 PF03592 PF00067 PF03593 PF00360 PF00344 PF03443 PF03443 PF03460 PF03460	Get Data : Load the Biomart result fil Galaxy	le in	34: mart_exportixt (*) 34: mart_exportixt (*) 228 lines, format tabular, database Info: uploaded tabular file 2 3 4 Reference Feature Start (-) End OB X Bofurd_P00380.1 6 127 PF03 Bofurd_P004830.1 61 271 PF09 Bofurd_P004830.1 791 819 PF00 Bofurd_P004830.1 791 819 PF00 Bofurd_P004830.1 791 819 PF00 Bofurd_P004830.1 61 271 PF00 228 lines, format tabular, database Info: 33: gene list 228 lines, format tabular, database Info: 32: Select on data 31 31: Normalized Data_1.36430988674





<u>Fichier Édition Affichage H</u>istori

E,

Options 🚽

🔶 🖌 🔁 😣

4

Tools

Get Data Send Data

ENCODE Tools Lift-Over Text Manipulation

Filter and Sort

Join, Subtract and Group Join two Queries side by side on a

Compare two Queries to find

common or distinct rows

Subtract Whole Query from

 Group data by a column and perform aggregate operation on

specified field

another query

other columns.

Column Join

Convert Formats Extract Features Fetch Sequences Fetch Alignments Get Genomic Scores **Operate on Genomic Intervals**

Statistics Wavelet Analysis Graph/Display Data

Evolution Metagenomic analyses FASTA manipulation NGS: QC and manipulation NGS: Indel Analysis NGS: SAM Tools FastX Toolkit MAPHITS

Regional Variation Multiple regression

Multivariate Analysis

Unix Tools

Σ) Galaxy

💳 Galaxy

Join files



oric	jue <u>M</u> arque-pages <u>O</u> utils	Aid <u>e</u>	loin	Si	iheti	ract ar	d Group section				5 ⁴ 2
ε	http://urgi.versailles.inra.fr/c	galaxy/	<u>JUII</u> ,		1031	aciai	iu Oloup Section	<u> </u>			
×	💫 URGI - Gene list result	is 💥 🏹 F	Join	the	der	ne list	file with Biomart	resul			~
				uio	goi		no with Biomart	10001			
				o h		Jump	with gong name				
▼	BofuT4_P001930.1	50fuT4_P001130		e D	y CC	JUIIII	with gene name				Options -
	Boful4_P002750.1 Boful4_P003870.1	BofuT4 P00/870			-						
	BofuT4 P003990 1	BofuT4 P00 3990.1	3	194	PF06101						
	BofuT4_P004P50.1	BofuT4_P0(4830.1	791	819	PF00734			= 3	7: Join two (Queries on da	ata 👁 🖊 💥
	BofuT4_P004830.1	BofuT4_PC04830.1	61	271	PF00933			3	4 and data 3	<u>13</u>	
	Bofu / P004830.1	BofuT4_F_4830.1	353	601	PF01915						
	Botard_P005160.1	Botu14_P005160.1	3	283	PF00067			3	4: mart_exp	ort.txt	@ / X
	B0TUT4_P005170.1							2	28 lines, form	mat: tabular, c	database: <u>?</u>
	BofuT4_P006540_1	BofuT4 P006540 1	269	574	PE00732			D. D.	nfo: uploader	d tabular file	
	BofuT4 P006540.1	BofuT4_P006540.1	815	846	PF00734				_ 0		
	BofuT4 P006540.1	BofuT4 P006540.1	685	801	PF05199						
	BofuT4_P007640.1	BofuT4_P007640.1	90	152	PF00775				Defenses Fret	2	3 4
	BofuT4_P007740.1	BofuT4_P007740.1	22	444	PF00171				Reference Feat	life Start (-1)	198 PE00857
	BofuT4_P008190.1	BofuT4_P008190.1	50	386	PF01301				BofuT4_P003870	.16	217 PF03443
	BotuT4_P008190.1	BotuT4_P008190.1	394	575	PF10435				BofuT4_P003990	.1 3	194 PF06101
	B0TU14_P008630.1	B0TUT4_P008630.1	80	265	PF08545				BofuT4_P004830	.1 791	819 PF00734
	B01014_P008630.1	B01014_P008030.1	2/3	305	PF02803				BofuT4_P004830	.1 61	271 PF00933
	BofuT4_P008680_1								<.	- 111	>
	BofuT4 P010370.1	BofuT4 P010370.1	34	288	PF00657						
	BofuT4 P010380.1	BofuT4 P010380.1	26	86	PF05730				2) gape list		
	BofuT4_P010920.1	BofuT4_P010920.1	18	164	PF09792			1	3: gene list	n et te buler i	X V @
	BofuT4_P011170.1							4	.28 lines, ion	nai. iadular, i	Jalabase. <u>7</u>
	BofuT4_P011330.1	BofuT4_P011330.1	986	1118	PF00156			•	110. 1 2 -		
	Botul4_P011330.1	Botul4_P011330.1	/69	847	PF04275						
	B01014_P011330.1	B01014_P011330.1	317	459	PF01505				1		
	BofuT4_P011380_1	BofuT4 P011380 1	1	83	PE03006				BofuT4_P001930	.1	
	BofuT4 P011810.1	BofuT4 P011810.1	17	140	PF12296				BofuT4_P002750	.1	
	BofuT4 P012350.1	BofuT4 P012350.1	34	253	PF00701				BofuT4_P003870	. 1	
	BofuT4_P012360.1	BofuT4_P012360.1	17	282	PF00248				8ofuT4_P003990	. 1	
	BofuT4_P012400.1	BofuT4_P012400.1	98	374	PF00501				BofuT4_P004830	. 1	
	BofuT4_P012400.1	BofuT4_P012400.1	571	636	PF00550				3ofuT4_P005160	. 1	
	BofuT4_P012400.1	BofuT4_P012400.1	680	920	PF07993						
	BotuT4_P012420.1	BotuT4_P012420.1	69	441	PF07690					ata 31	@ / %
	B0TUT4_P012500.1	PofuT4 P012210 1	00	204	PE02225		Diamina ana ara				
	BofuT4_P013210.1	B01014_P013210.1	90	204	FF03235		i Blanks are der	les			• / ×
	BofuT4 P013640.1	BofuT4 015040	0	59	PF04119					ta 1.36430	098867419643
	BofuT4 P014290.1	BofuT4 P014290.1	116	195	PE01822						
	BofuT4_P014290.1	BofuT4_P014290.1	239	465	PF11790		Without PFL				
	BofuT4_P014350.1	BofuT4_P014350_1	62	222							
	BofuT4_P015750.1	~									
	BofuT4_P015800.1	BotuT4_P015800.1	115	295	PF00544		domain				
	Boful 4_P016040.1	BOTUI4_P016040.1	6	80	PF03992		uumam				
	Botur4_P018370.1	RefuTA R010100 1	170	959	PE03630						
-	BofuT4_P019100.1	BofuT4_P019510.1	3	309	PE03060				_		
	BofuT4 P020150.1	BofuT4_P020150.1	38	213	PF00106						
	BofuT4 P024150 1							$\overline{}$			







From Biomart result, get gene names and PFAM entries. Then count the number of identical PFAM entry / gene.

The aim is to remove duplicates.



ta 👁 🖊 💥

atabase: ?

End DB Xref Ac

198 PF00857

217 PF03443

194 PF06101

819 PE00734

271 PF00933

>

• 0 ×

 \sim

Galaxy

Σ) Galaxy

Tools

Get Data

Lift-Over

Send Data

ENCODE Tools

Filter and Sort

Convert Formats

Extract Features

Fetch Sequences

Fetch Alignments

Statistics

and LDA

Analysis

p-values

Wavelet Analysis

Graph/Display Data

Regional Variation

Multiple regression

Multivariate Analysis

Metagenomic analyses

NGS: OC and manipulation

FASTA manipulation

Evolution

Get Genomic Scores

Operate on Genomic Intervals

Summary Statistics for any

Count occurrences of each record

Correlation for numeric columns

· Perform LDA Linear Discriminant

Draw ROC Receiver Operating

Compute q-values based on

multiple simultaneous tests

Characteristic plot

T Test for Two Samples

Generate A Matrix for using PC

numerical column

Unix Tools

Text Manipulation

3

1

1

1

1

1

1

1

1

1

1

1

1

1

1

5

1

1

1

1

1

1

1

1

1

1

1

1

1 1

1

1

1

BofuT4 P093940.1

BofuT4 P093940.1

BofuT4 P096750.1

BofuT4 P097870.1

BofuT4 P098790.1

BofuT4 P098790.1

BofuT4 P098800.1

BofuT4 P098800.1

BofuT4 P098800.1

BofuT4 P098800.1

BofuT4 P098960.1

BofuT4 P098960.1

BofuT4 P101100.1

BofuT4 P101740.1

BofuT4 P102850.1

BofuT4 P103120.1

BofuT4 P103800.1

BofuT4 P103810.1

BofuT4 P103870.1

BofuT4 P106980.1

BofuT4 P107170.1

BofuT4 P107170.1

BofuT4 P108520.1

BofuT4 P108740.1

BofuT4 P108760.1

BofuT4 P109330.1

BofuT4 P112680.1

BofuT4 P112680.1

BofuT4 P112910.1

BofuT4 P113100.1

BofuT4 P113100.1

BofuT4 P113100.1

BofuT4 P114590.1

BofuT4 P114590.1

BofuT4_P114590.1

BofuT4 P115120.1

BofuT4 P115120.1

BofuT4 P117020.1

BofuT4 P117260.1

BofuT4 P118670.1

PF00023

PF05729

PF00106

PF00246

PF00107

PF08240

PF00122

PF00689

PF00690

PF00702

PF01565

PF08031

PF00106

PF00561

PF03022

PF00657

PF00264

PF11807

PF11807

PF00795

PF00023

PF05729

PF01039

PF02515

PF06985

PE03443

PF01565

PF08031

PF00150

PF00441

PF02770

PF02771

PF00150

PF00734

PF03442

PF00278

PF02784

PF08241

PF00326

PF00150









Gene Ontology Analysis: Blast2GO









Aim:

- GO annotation from Blast Results and Identified domains (Ana Conesa, et al, Bioinformatics, Sept 2005)

Export:

- annotations, table
- full project (re-usable data)

Display:

- blast statistics
- GO distributions
- kegg map









Gene Ontology : Blast2GO



Platform	Research Projects Data Tools Species SEARCH
Creation	
Species	You are here : <u>Home</u> / <u>Home URG</u> / <u>Species</u> / <u>Botrytis</u> / Download
Vitis	Download
Wheat	
Botrytis	Genomic sequences
Sequences & Databa	 <u>bt4_ctq.fsa.qz</u> (11.29 MB) Botrytis T4 contigs (virtual contigs extracted from supercontigs after final assembly th
License	are separated by gap of at least one nucleotide N) bt4_ctg_exclusions are (667-17 kB) Bototis T4 excluded contins (from excluded supercontins (length < 20Kb or
Consortium	Ns > 10%)
Publications	0
Sequences & Databa	Ses Potrt of augul 1 foo at (5.20 MP) Potrtic T4 predicted appear
(restricted)	It contains reliable and unreliable Eugene predicted gene (without UTRs)
Leptosphaeria	BofuT4_Pxxxxxx.1 : gene with length > 300 Nucl OR (gene with length < 300 as with EST Evidence) BofuT4_UPxxxxxx.1 : gene with length < 300 as without EST evidence (at the time of prediction pipeline))
Microbotryum	Bold 14_ar 3000001 - gone warrengar - 500 aa waroat Eor evidence (at ale arre of predicaon pipeline))
Venturia	 <u>BofuT4 orfprotall 1.fsa.gz</u> (3.45 MB) Botrytis T4 predicted protein: It contains reliable and upreliable Eugene predicted protein
A set i de se i s	BofuT4_Pxxxxx.1: protein with length > 100 aa OR (protein with length < 100 aa with EST Evidence)
Arabidopsis	Botul4_uPxxxxxx.1: protein with length < 100 aa without EST evidence (at the time of prediction pipeline))
Oryza	 Bot chips.fsa.gz (6.00 MB) Botrytis T4 (genes and ESTs) and B05.10 (genes) sequences used for Botrytis
Populus	Nimblegen design
Maize	Supplementary downloads DO
	 bt/ supple data for aff at (11.24 MD) Off file for Detation T4 conting manning on suppression
Medicago	• <u>bit4 support</u> <u>curve</u> (11.34 mb) Gin life for Bouryus 14 contrigs mapping on supercontig
Medicago	 <u>bt4_ctq_supctq_coordinates.qz</u> (11.34 MB) Gin the for Botrytis 14 contrigs mapping on supercontig <u>bt4_ctq_supctq_coordinates.qz</u> (26.59 kB) Botrytis T4 contigs mapping on supercontig <u>bt4_ctq_supctq.size.qz</u> (14.98 kB) Botrytis T4 contigs and supercontig size
Medicago Pisum	 <u>bt4 supctor dq.isa.qii.qz</u> (11.34 MB) Gin life for Botryus 14 contrgs mapping on supercontig <u>bt4 ctq supctq coordinates.qz</u> (26.59 kB) Botrytis T4 contigs mapping on supercontig <u>bt4 ctq supctq.size.qz</u> (14.98 kB) Botrytis T4 contigs and supercontig size <u>BofuT4 orfnucall 1.cusp.qz</u> (10.4 kB) Codon usage table carculated on Botrytis T4 genes



Download and Run









Load Project



(File	C:\User: e Bla	<mark>∖Nico</mark> las Lapalu∖Downloa st Mapping Annota	Menu: F	-ile	>	Loa	d B2	2G	-Project > Blast2go_bc	otrytis.da	
2		GO:0007067,GO:00160	21 🚺 🍞								
\mathbf{r}	nr	sequence name	seq description	length	#hits	min. eValue	sim mean	#GOs	GO IDs	Enzyme	InterPro
	1	BofuT4_P000020.1	het domain protein	753	20	0,0E0	66.1%	0		-	IPR002110; IPR010730; G3D.1.25.40.20 (GENE3D), PTHR18958 (PANTHER), PTHR18958:SF302 (PANTHER)
4	2	BofuT4_P000030.1	hypothetical protein BC1G_08771 [Botryotinia fuckeliana B05.10]	530	20	0,0E0	64.55%	3	F:ATP binding; P:metabolic process; F: catalytic activity	-	SSF51735 (SUPERFAMILY), SSF56059 (SUPERFAMILY)
1	3	BofuT4_P000040.1	predicted protein [Botryotinia fuckeliana B05.10]	742	3	0,0E0	86.333333	7	P:fatty acid biosynthetic process; F:holo-[acyl-carrier-protein] synthase activity; P:macromolecule biosynthetic process; C:intracellular; F:magnesium ion binding; F:zinc ion binding; P:pantothenate biosynthetic process	EC:2.7.8.7	IPR001876; IPR004568; IPR008278; coil (COIL), seg (SEG), SSF54928 (SUPERFAMILY), SSF90209 (SUPERFAMILY)
	4	BofuT4_P000050.1	hypothetical protein BC1G_08769 [Botryotinia fuckeliana B05.10]	292	20	0,0E0	71.15%	2	F:molecular_function; P:biological_process	-	IPR013920; SSF88633 (SUPERFAMILY)
2	5	BofuT4_P000070.1	lamina-associated polypeptide 2	387	20	0,0E0	84.25%	3	F:inositol or phosphatidylinositol phosphatase activity; <mark>P</mark> :proteolysis; F:aminopeptidase activity	EC:3.4.11.0	IPR007484; G3D.3.40.630.10 (GENE3D), seg (SEG),
G	D Grap	hs Application Messa	ges Blast/IPS Results	Stati	stics	Kegg Maps					

Blast2GO - Latest updates!

- Please visit B2G-FAR: The Blast2GO Functional Annotation Repository (http://www.b2gfa

- Please help to improve B2G. Suggest and vote new ideas at http://blast2go.uservoice.co

- A new SELECT menu to filter/query your data-set for InterProScan results:

- Try the new Keyboard shortcuts

- Find more information in the BlastResult table (frame, hit/query ratio...)

- We added automatic internet browser detection

- Improved interface for the enrichment results export, filtering and visualization

- Export pie and bar charts in plain text-format

- Find a new Java memory monitor under TOOLS

Extract list of genes:

enrichment analysis





-

Load Ontology tree





URGI

C I I

Load Kegg Maps

URGI













annotations	28420
annotated sequences	7316
Mean GO level	4.792
GO Standard deviation	1.662
number of Enzyme Codes	2567
sequences with EC	2229



URGI





Blast environment and further analysis Mobyle Blast Mobyle Blast-Koriviewer SRS





Blast Interface



Mobyle

(guest) <u>set email</u> | <u>sign-out</u>



http://urgi/mobyle/cgi-bin/portal.py?form=blast2









Mobyle

(guest) <u>set email | sign-out</u>

Programs	Welcome Programs Data Bookmarks Job	
 ▼ blast ● blast2 ● blast2-koriviewer ▶ blat ▶ extractseq 	BLAST2 x BLAST2	Reset Help Pages
Data Bookmarks	NCBI BLAST, with gaps	Run
Jobs refr	* Blast program (-p) ? Choose a program	•
Tutorials refr	Database	
How to use Mobyle? A step by step tutorial	Protein db (-d) ? Choose a database Nucleotid db (-d) ? Choose a database	•
Alignment formats	Query Sequence	
	Paste	clea
	Start of required region in query sequence (1) 2	
	End of required region in query sequence (-L) ? Number of concatenated queries (blastn or tblastn) (-B)	
	Scoring options	
	Cost to open a gap (-G) ?	
R	Mobyle: Blast	t



NRA

Blast Result



60

BC1G_12943.1 hypothetical protein (translation) BC1G_02595.1 hypothetical protein (translation) BC1G_12741.1 hypothetical protein (translation) BC1G 06261.1 hypothetical protein (translation) BC1G_08139.1 hypothetical protein (translation) BC1G_04895.1 hypothetical protein (translation) BC1G_01191.1 hypothetical protein (translation) BC1G_05929.1 hypothetical protein (translation) BC1G_09479.1 hypothetical protein (translation) BC1G 16152.1 hypothetical protein (translation) BC1G_03492.1 hypothetical protein (translation) BC1G 02711.1 hypothetical protein (translation) BC1G_04226.1 hypothetical protein (translation) BC1G 14609.1 hypothetical protein (translation) BC1G_12527.1 hypothetical protein (translation) BC1G_03609.1 hypothetical protein (translation) BC1G_03476.1 predicted protein (translation) BC1G_06440.1 hypothetical protein (translation) BC1G_12528.1 hypothetical protein (translation) BC1G_14865.1 hypothetical protein (translation) BC1G 12502.1 hypothetical protein (translation) BC1G 14004.1 hypothetical protein (translation) BC1G_03296.1 hypothetical protein (translation) BC1G 02615.1 predicted protein (translation)

34	0.15
33	0.19
33	0.28
33	0.29
33	0.31
33	0.38
33	0.38
32	0.47
32	0.51
32	0.55
32	0.55
32	0.59
31	1.1
31	1.3
30	3.0
29	4.8
29	5.0
29	5.1
29	5.6
28	6.3
28	6.6
28	8.4
28	8.4
28	8.9

	BofuT4_P00	0			25	9		1	500			758
l	BC16_07016.1											
I	BC1G_04459.1											
I	BC1G_06993.1											
I	BC16_05548.1											
I	BC1G_06991.1											
I	BC16_04754.1											
I	BC16_07642.1											
I	BC1G_14540,1											
I	BC16_06125.1											
I	BC1G_14558,1											
I	BC16_07403.1											
I	BC1G_06230.1											
I	BC1G_06630.1											
I	BC16_07008.1											
I	BC1G_05338.1											
I	BC16_01067.1											
I	BC1G_06998.1											
I	BC16_03934.1											
I	BC16_03964.1								1			
I	BC1G_05202.1											
I	BC16_06289.1											
I	BC16_00980,1											
I	BC16_14015.1											
I	BC16_00021.1											
I	BC1G_08550,1											
I	BC16_15813.1											
I	BC16_13798.1											
I	BC1G_14674.1											
I	BC16_01672.1											
I	BC1G_09052.1											
I	BC16_04271.1											
I	BC16_11616.1											
I	BC1G_08238.1											
I	BC16_04309,1											
I	BC1G_05849.1											
I	BC16_02617.1											
I	BC16_15803.1											
I	BC1G_12416.1											
I	BC16_09993.1											
I	BC1G_13005,1											
x	DOID 10000 1											

http://urgi.versailles.inra.fr/mobyle/data/jobs/blast2/U12797899396896/blast2.html#A_BC1G_00980.1_1_22

Mobyle: Blast

usual display -> html, text



Job managment



nicolas.lapalu@versailles.inra.fr (guest)

set email | sign-out

Mobyle

Welcome Programs Data Bookmarks Tutorials Jobs Programs blast2-koriviewer blast2 Search х 09/07/11 11:50:13 09/07/11 11:47:44 blast http://urgi.versailles.inra.fr/mobyle/data/jobs/blast2/U12797899396896 blast2 blast2-koriviewer update job status ask for help back to program form remove this job blat ⊢ results extractseq Blast text report (BlastTextOutput) Data Bookmarks refresh Sequence: query_seq.data blast2.txt save Gapped blasi and PSI-blasi; a new generation of protein database search Jobs programs", Nucleic Acids Res. 25:3389-3402. refresh blast2 - 09/07/11 11:47:44 blast2 - 09/07/11 11:48:32 Reference for compositional score matrix adjustment: Altschul, Stephen F., blast2-kol Tewer -09/07/11 11:50:13 John C. Wootton, E. Michael Gertz, Richa Agarwala, Aleksandr Morgulis, Alejandro A. Schaffer, and Yi-Kuo Yu (2005) "Protein database searches using compositionally adjusted substitution matrices", FEBS J. 272:5101-5109. Tutorials How to use Mobyle? A ste Query= BofuT4 P000020.1 | 753 aa by step tutorial (753 letters) Sequence formats full screen view bookmark as: blast2.txt Alignment formats Blast html report (BlastHtmlOutput) Job management during one session. Madden, Alejandro A. Schaffer, and David J. Lipman (1997), tion of protein database search b2.

Allow to Re-do jobs with different parameters

djustment: Altschul, Stephen F.



Bioger

Mobyle

(guest) <u>set email | sign-out</u>



http://urgi/mobyle/cgi-bin/portal.py?form=blast2-koriviewer



Mobyle: Blast-Koriviewer



Launch Koriviewer



nicolas.lapalu@versailles.inra.fr (guest) set email | sign-out

Mobyle

Programs	Welcome Programs Data Bookmarks Jobs Tutorials					
Search	blast2 09/13/11 10:17:39 × blast2-koriviewer 09/13/11 10:18:07 ×					
 blast blast2 blast2-koriviewer blat extractseq 	http://urgi.versailles.inra.fr/mobyle/data/jobs/blast2-koriviewer/Q21332044632912 update job status ask for help back to program form remove this job results results					
Data Bookmarks	Click to run koriviewer (HtmlOutput)					
Sequence: query_seq.data re lobs	fresh koriviewer.html save fresh Click to run Koriviewer					
blast2-koriviewer - 09/13/11 10:18:07	Html link :					
How to use Mobyle? A step by step tutorial Sequence formats Alignment formats	full screen view bookmark as: koriviewer.h					
	parameters Query (-i) (Sequence) file format detection program re-formatted file query, seq. data.ori (BAW format) squizz					
	Blast program (-p) (Choice) Value: blastp					
	Value: BofuT4_orfprotall_1 Command line echo \ <h1\>\<a '="" -d'="" -f10`="" blast2.xml\="" cut="" href="http://kvws.korilog.com/urgi/startapp.php?url=/mobyle/data/jobs/blast2-koriviewer/`pwd" ="">Click to run Koriviewer\\</h1\> > koriviewer.html ; blastall -m 7 -p blastp -d BofuT4_orfprotall_1 -i query_seq_data.fasta -o blast2.xml					
Δ	Mobyle: Blast-Koriviewer					





Result table



BLAST result 3	ults	Hits					Results for: Seq 1: 11	9 hits 🔻 Hits: 119	HSPs:
blastp vs. B051 BofuT4_P0000	i1 0	List	Conserved regions	Alignment & Tree	Position Specific Matrix				Тахо
·		# Acce	ession			Definition		Quali	ity #H
	1	7015	BC1G_07016.1	hypothetical protein (translation)				4
	2	4458	BC1G_04459.1	hypothetical protein (translation)				
	3	6992	BC1G_06993.1	hypothetical protein (translation)				
	4	5547	BC1G_05548.1	hypothetical protein (translation)				
	5	6990	BC1G_06991.1	hypothetical protein (translation)				
	6	4753	BC1G_04754.1	hypothetical protein (translation)				
	/	/641	BC1G_0/642.1	hypothetical protein (translation)				
	8	61.24	BC1G_14540.1	nypotnetical protein (translation)				
	10	1/1557	PC1G 1/1559 1	hypothetical protein (translation)				
	11	7402	BC1G_14558.1	hypothetical protein (translation)				
	12	6229	BC1G 06230.1	hypothetical protein (translation)			i i i i i i i i i i i i i i i i i i i	
	13	6629	BC1G_06630.1	hypothetical protein (translation)				
	14	7007	BC1G 07008.1	hypothetical protein (translation)				
	15	5337	BC1G 05338.1	hypothetical protein (translation)			Ü	
	16	1066	BC1G_01067.1	hypothetical protein (translation)				
	17	6997	BC1G_06998.1	hypothetical protein (translation)				
	18	3933	BC1G_03934.1	hypothetical protein (translation)				
	19	3963	BC1G_03964.1	hypothetical protein (translation)				
	20	5201	BC1G_05202.1	hypothetical protein (translation)				
	21	6288	BC1G_06289.1	hypothetical protein (translation)				
	22	979	BC1G_00980.1	hypothetical protein (translation)				
	23	14014	BC1G_14015.1	hypothetical protein (translation)				
	24	20	BC1G_00021.1	hypothetical protein (translation)				
	20	15010	BC1G_08550.1	hypothetical protein (translation)				
	20	12707	PC1G 12709 1	hypothetical protein (translation)				
	28	14673	BC1G_13738.1	hypothetical protein (translation)				
	29	1671	BC1G 01672.1	hypothetical protein (translation)				
	30	9051	BC1G 09052.1	hypothetical protein (translation)				
	31	4270	BC1G_04271.1	hypothetical protein (translation)				
	32	11615	BC1G_11616.1	hypothetical protein (translation)				
	33	8237	BC1G_08238.1	hypothetical protein (translation)				
	_								
		🗄 Aligi	nment: Query (753 aa) vs. 6229 (464 aa)					



Mobyle: Blast-Koriviewer

See conserved regions





URGI

Mobyle: Blast-Koriviewer

लव

EURGI Select subset of results and refine analysis



y KoriViewerWS	- [urgi.versailles.inra.fr]	A general strage decomposition		
Analyse	BLAST results result_3 blastp vs. B0510_proteins BofuT4_P000020.1 753 aa	List Conserved regions Alignment & Tree Position Specific Matrix	Results for: Seq 1: 27 hits Hits: 27	HSPs: 76 Taxonomy
_	subset_1 blastp vs. B0510_proteins BofuT4_P000020.1 753 aa	Query-Anchored Alignment Distance Tree Distance Tree created with 76 HSPs from Alignment, range 1-753	Method: Neighbour Joining Correction: Kin	nura
Ext	ract conse edit tree, e	rved regions, xport		
Help and Tutorial		HSP data of the selected leaf: #* Accession Definition	Quality	# HSPs
		Alignment		2214- (1221-4



Mobyle: Blast-Koriviewer

Mobyle: extract sequence



set email | sign-out

<u> E</u> ichier Éditio <u>n A</u> ffichage <u>H</u> istorique <u>M</u> arque-pages <u>O</u> utils Aid <u>e</u>	
💠 🗼 🗸 🛃 🕼 http://urgi/mobyle/cgi-bin/portal.py?form=blast2	😭 🗸 🔽 mobyle pasteur 🔍
ξ) Free access banks - URGI 💥 👎 Query History 💥 ξ) Mobyle portal - blast2 🗶	~
	nicolaslap@versailles.fr <i>(guest)</i>

Mobyle

URGI

rograms	Welcome Programs Data Bookmarks Jobs Tutorials	
Search blast blast blat vextractseq extractseq extractseq extractseq blat blat blat vextractseq blast blast blast blast blast blast2 - 09/09/11 17:21:56 blast2 - 09/09/11 17:21:57 blast2 - 09/09/11 17:21:57 blast2 - 09/09/11 17:21:57 blast2 - 09/09/11 17:21:57 bla	BLAST2 x extractseq-urgi x extractseq-urgi Reset Help Pages Extract regions from an URGI databank Run * Database Plantgene non redundant proteins (february 2003) \$ Required section \$	
Itorials How to use Mobyle? A step by step tutorial Sequence formats Alignment formats	 Sequence ID Regions to extract ? Additional section Write regions to separate sequences ? Output section Name of the output sequence file (outseq) extractseq.outseq Choose the sequence output format Fasta ? *: mandatory parameter Reference: http://emboss.sourceforge.net/	
	Author(s): EMBOSS Program help pages: <u>http://bioweb2.pasteur.fr/docs/EMBOSS/extractseq.html</u> 	



Mobyle:other tools



SRS Release 8.3 Copyright © 2007 BioWisdom SRS Ltd. All Rights Reserved. Terms of Use Feedback

https://gpi.versailles.inra.fr/srs83



SRS: Databanks and tools





<u>F</u> ichier Éditio <u>n</u> <u>A</u> ffichage <u>H</u> ist	torique <u>M</u> arque-pages <u>O</u> utils Aid <u>e</u>				5 ⁴ 9 8 ₂ 9
🔶 👻 😂 🖉 [🚼 https://gpi.versailles.inra.fr/srs83/analysis	sTools.do		☆ 🗸 Google	
📴 start_blast2go [A universal	🗙 😫 Analysis Tools 🛛 🗙				~
biowisdom*	Find	S∣≣ in Select	▼ Go	alu logned in L	
	my SRS query builder analysis tools	history - manage views - databank list - <mark>Help?</mark>	St	art permanent session	
Analysis Tools	K				
Quick Launch	Available Analysis Tools - listed by ty	pe 🕂 Expand all 😑 Collapse all			
Launch analysis tool : Antigenic	H Alignment Tools Display Tools Edit Tools Information Tools Mucleic Tools				
Packages Information BLAST EMBOSS OTHER	H Protein Tools H Phylogeny Tools Similarity Search Tools Utils Tools		Analy	rsis tools section	

SRS Release 8.3 Copyright @ 2007 BioWisdom SRS Ltd. All Rights Reserved. Terms of Use Feedback



EURGI

SRS: Databanks and tools



Launch Blast



<u>F</u> ichier Éditio <u>n</u>	<u>A</u> ffichage <u>H</u> istorique <u>M</u> arque-pages <u>O</u> utils Aid <u>e</u>	24. 9,
♦ ♦ ►	😂 🛞 🖀 🔝 https://gpi.versailles.inra.fr/srs83/packageinfo.do?packageName=BLAST	☆ 🗸 Google 🔍
🛂 start_blast2	go [A universal 💥 📑 Package Information 🛛 🗶	~
biowis	Find SIE in Select My SRS query builder analysis tools history - manage views - databank list - Help?	Go nlapalu logged in I <u>Start permanent</u> session
Package Info	prmation	
Name	BLAST	
Version	2.2.18	
Description	BLAST (Basic Local Alignment Search Tool) package from NCBI is a set of similarity search programs designed to explore all of the available sequer of whether the query is protein or DNA. The BLAST programs have been designed for speed, with a minimal sacrifice of sensitivity to distant seque scores assigned in a BLAST search have a well-defined statistical interpretation, making real matches easier to distinguish from random backgrounn heuristic algorithm which seeks local as opposed to global alignments and is therefore able to detect relationships among sequences which share o similarity (Altschul et al., J Mol Biol 1990 215:403-10).	nce databases regardless nce relationships. The d hits. BLAST uses an nly isolated regions of
www	http://www.ncbi.nlm.nih.gov/BLAST/	
Tools	BlastP Launch BlastX Launch BlastN Launch TBlastN Launch TBlastN Launch BlastN Launch	nch your Blast Program: lastP, BlastN,
	SRS Release 8.3 Convrint @ 2007 BioWisdom SRS Ltd. All Righ	



SRS: Databanks and tools





📮 ా 🌱 🔁 🔘 🕋 🔝 https://gpi.versailles.inra.f	r/srs83/displayTool.do?toolName=BlastP	☆ ~) 💽 < Goo	gle
🖥 start_blast2go [A universal 💥 👫 Tool Launch	×		
biowisdom* SRS Find my SRS query builder	SE in Select	▼ Go nlapalu logged in <u>Start permanent</u>	
Fool Launch : BlastP $_i$	3	session	
Step 1 : Data Source 📀			
O Upload from file :	Parcourir		
KANLSERF-SLQIRPLAELIDMYIRQAIDIRDKL-ALLONSSDDFGKAGL VFQQLVKFVLGKDISFRASSQTPRIKCRGIVVGQIYSVRMNSRQRVIFTS RBWTLPASAKPIRERDIICLTYGASTPSIIRLCKOHFSMIVIAVTPLNGL SKTQFLRDFELWDWESSSGMRDEGEYKTLIETFSQASVFSKVEPGGYL AILDDLVEVKEADERFIAAQDEYLAAFGKMPSWYESGSKCGRTILAFAA LLETIHPUKDGKVGRTPLFFAAEHGHEATVKLLLATGQVNTESKDESGE HESVVKLLLSIGQIEVNSKDGSDRTPLCWAAINGHKSVIKLLLSIDQIEV LCWAAREGHESVIKLLLSIRQIEVNSKDGFDQTPLCLAAREGHESVVKLL KDRFERTPLYYANMNKHVSVVKLLEDHAKDHTT*			
Step 2 : Launch Options			
Views: HomologyView ↓ ↓	ontinue to alter the below, or you can Inch Now !		
Save my settings as a parameter set			





ichier Éditio <u>n A</u> ffichage <u>H</u> istorique <u>M</u> arque-pages <u>O</u> utils Aid <u>e</u>	۵. ۲
🛑 🗼 🛩 🛃 🛞 🖀 🔝 https://gpi.versailles.inra.fr/srs83/displayTool.do?toolName=BlastP	☆ 🗸 Google 🔍
a start_blast2go [A universal 🗶 🜸 Tool Launch 🛛 🗶	×
Database to search:	<u>^</u>
Currently Selected : Botrytis T4 ORFs protein Botrytis T4 ORFs protein (Unreliable) Sclerotinia ORFs protein Stagnosporum nodorum ORFs protein	
Kyoto Encyclopedia of Genes and Genomes (24feb11) NCBI nr - All Non-redundant Genbank CDS translation+PDB+Swissprot+PIR Repbase REPET Edition (16_03)	
Botrytis databases	
All databases in group Botrytis B05.10 ORFs protein Botrytis T4 ORFs protein Botrytis Cinera T4 orf all BofuT4_orfprotall_1	Select several databanks and
ELeptosphaeria maculans databases	man and the state is
All databases in group Leptosphaeria maculans ORFs protein Leptosphaeria maculans Fgenesh ORFs protein	run one blast job
□ Sclerotinia databases	
All databases in group Sclerotinia OREs protein	
Stagnosporum databases	Ex: run blast adainst Sclerotinia
All databases in group Stagnosporum nodorum OREs protein	and Botrytis ORFs
All databases in group UniProtKB UniProtKB UniProtKB/Swiss-Prot UniProtKB/TrEMBL Fungi-not in TrEMBI	
MaizeSequence oro databases (march 2011)	
Maize 5a WGS translations (Peptide sequences)	
Other Protein Databases	
Arabidopsis thaliana predicted Arabidopsis thaliana proteins Oryza sativa TIGR V5 ProteomeOryza Chloroplast protein from TIGR (1503 sequences) from Genefarm sativa TIGR V5 proteome (january (may 2003)) Plant repeats from TREP (october 2006) RCSB World Wide Protein Data Bank (3.2)	
Job name: temp	



EURGI
Blast result View



Eichier Édition Affichage Historique Marque-pages Qutils Aide						
🔶 🖌 🔁 🖉 🌰 📑	https://gpi.versailles.inra.fr/s	srs83/launchTool.do			☆ 🗸	Google
🛂 start blast2go [A universal 🔉	🕻 🗼 Query Results	×				
экэ	my SRS query builder ar	nalysis tools history - manage	e views - databank list - <mark>Help?</mark>	nlapalu logge <u>Start perma</u> sess	d in .nent .ion	
Query Results				(bookmarl	0	
Primary Search 😭	Refir	e Query Expression: [BLAS]	P-JobName:temp_job1]			
Found 50 entries						
Related Information	Options: Selected Entries 👻	View 👻 Results/Page 👻	Page 1	/2 >		
Protein Sequence	4					
Trotein sequence	H					
	d Choose Colouring Scheme:	Score O E Value O Percent Id	edraw			
	e	E 0-90 200	> = 200 - Coloured by Score			
	40 40 40-50	50-80 80-200	>=200 - Coloured by Score			
	BofuT4_P000020.1					
			400 500		700	
	0 100	200 300	400 500	600	700	
	0 198 >BofuT4_P000020.1	200 300	400 500	600 600	700	
	9 188 >BofuT4_P000020,1 >BofuT4_P005460,1 >BofuT4_D005400,1	200 300	400 500	600	700	
	0 100 D8ofuT4_P000020.1		400 500	600		
	0 100 DEofuT4_P000020.1		409 599 ID:temp_job1_1 Accession: Database: BofuT4_P000020.1 Description: 753	600	790 	
	0 100 DBorfuT4_P000020.1		409 599 ID:temp_job1_1 Accession: Database: BofuT4_P000020.1 Description: 753 Score: 1552.000000	600		
	0 100 DBorbuT4_P000020.1 DBorbuT4_P0055400.1 DBorbuT4_P0055400.1 DBorbuT4_P005000.1 DBorbuT4_P0085470.1 DBorbuT4_P0085470.1		400 500 ID:temp_job1_1 Accession: Database: BofuT4_P000020.1 Description: 753 Score: 1552.000000 Expect: 0 % ID: 100	600	700	
	0 100 DBorburt4_P000020.1 DBorburt4_P0005400.1 DBorburt4_P0055400.1 DBorburt4_P003000.1 DBorburt4_P003000.1 DBorburt4_P0030400.1 DBorburt4_P0035470.1 DBorburt4_P107170.1		400 500 ID:temp_job1_1 Accession: Database: BofuT4_P000020.1 Description: 753 Score: 1552.000000 Expect 0 % ID: 100	600		
	8 108 >BofuT4_P000020.1		400 500 ID:temp_job1_1 Accession: Database: BofuT4_P000020.1 Description: 753 Score: 1552.000000 Expect 0 % ID: 100	600		
	0 100 >BofuT4_P000020.1	200 300	400 500 Dttemp_job1_1 Accession: Database: BofuT4_P000020,1 Description: 753 Score: 1552.000000 Expect 0 % ID: 100	600		
	0 100 >BofuT4_P000020.1 > >BofuT4_P085400.1 > >BofuT4_P143800.1 > >BofuT4_P085470.1 > >BofuT4_P107170.1 > >BofuT4_P108660.1 >		400 500	600		
	0 100 DBofuT4_P00020.1		408 580	600	700	
	0 100 DSofuT4_P000020.1 DSofuT4_P005400.1 DSofuT4_P143800.1 DSofuT4_P008000.1 DSofuT4_P008000.1 DSofuT4_P0080470.1 DSofuT4_P107170.1 DSofuT4_P1098020.1 DSofuT4_P108560.1 DSofuT4_P008020.1		408 580	600		
	0 100 DBoFuT4_P000020.1 100 DBoFuT4_P000020.1 100 DBoFuT4_P103000.1 100 DBoFuT4_P00000.1 100 DBoFuT4_P1005600.1 100 DBoFuT4_P1005600.1 100 DBoFuT4_P1005500.1 100 DBoFuT4_P1005700.1 100		408 580	600		
	0 100 D8ofuT4_P000020.1 100 D8ofuT4_P000020.1 100 D8ofuT4_P00000.1 100 D8ofuT4_P000000.1 100 D8ofuT4_P000000.1 100 D8ofuT4_P1000000.1 100 D8ofuT4_P1000000.1 100 D8ofuT4_P1000000000000000000000000000000000000	200 300	409 590 Dtemp_job1_1 Accession: Database: BofuT4_P000020.1 Description: 753 Score: 1552.000000 Expect 0 % ID: 100			
	8 108 >BofuT4_P000020.1 >>>>>>>>>>>>>>>>>>>>>>>>>>>>		409 590			
	B 108 >BofuT4_P000020.1 > >BofuT4_P085400.1 > >BofuT4_P143800.1 > >BofuT4_P143800.1 > >BofuT4_P143800.1 > >BofuT4_P143800.1 > >BofuT4_P1035470.1 > >BofuT4_P1005600.1 > >BofuT4_P100570.1 > >BofuT4_P100570.1 > >BofuT4_P037430.1 > >BofuT4_P255600.1 >		400 500			
	B 100 >BofuT4_P00020.1 > >BofuT4_P005400.1 > >BofuT4_P143000.1 > >BofuT4_P005470.1 > >BofuT4_P107170.1 > >BofuT4_P100560.1 > >BofuT4_P100560.1 > >BofuT4_P100570.1 > >BofuT4_P100570.1 > >BofuT4_P025600.1 >		400 500	600		
	8 108 >BofuT4_P00020.1 > >BofuT4_P085400.1 > >BofuT4_P143800.1 > >BofuT4_P143800.1 > >BofuT4_P143800.1 > >BofuT4_P143800.1 > >BofuT4_P1035600.1 > >BofuT4_P1095600.1 > >BofuT4_P108570.1 > >BofuT4_P108570.1 > >BofuT4_P037430.1 > >BofuT4_P038080.1 >		409 500	600		
	0 100 >BofuT4_P00020.1 > >BofuT4_P00000.1 > >BofuT4_P143000.1 > >BofuT4_P143000.1 > >BofuT4_P103500.1 > >BofuT4_P103000.1 > >BofuT4_P103000.1 > >BofuT4_P009000.1 > >BofuT4_P100560.1 > >BofuT4_P100570.1 > >SS16_01503.1 > >BofuT4_P025600.1 > >S516_01503.1 > >S516_017172.1 > >BofuT4_P02520.1 >		408 580	660		
	0 100 DSofuT4_P00020.1 DsofuT4_P005400.1 DSofuT4_P143000.1 DsofuT4_P143000.1 DSofuT4_P005400.1 DsofuT4_P005600.1 DSofuT4_P100560.1 DsofuT4_P0090020.1 DSofuT4_P100560.1 DsofuT4_P009020.1 DSofuT4_P0090020.1 DsofuT4_P009020.1 DSofuT4_P009020.1 DSofuT4_P009020.1 DSofuT4_P009020.1 DSofuT4_P009020.1 DSofuT4_P009020.1 DSofuT4_P009020.1 DSofuT4_P025600.1 DSS16_01503.1 DSofuT4_P025600.1 DSS16_00908.1 DSS16_00908.1 DSS16_00908.1		408 580			
	B 108 >BofuT4_P000020.1 >BofuT4_P005400.1 >BofuT4_P143000.1 >BofuT4_P100500.1 >S516_01503.1 >BofuT4_P037430.1 >BofuT4_P025000.1 >S516_0172.1 >BofuT4_P02500.1 >S516_000000.1 >S516_000000.1 >S516_0000000.1		408 590	600		
	B 108 >BofuT4_P000020.1 >>>>>>>>>>>>>>>>>>>>>>>>>>>>		400 500	600 600		



Blast result View



EURGI	Blast result View	
Related Information	Options: Selected Entries - View - Results/Page - Page	je 1/1
T O O O O O O O O O O O O O O O O O O O	Select: All, None Select: All, None Image: BLASTP:temp job7 1 >BofuT4_P000030.1 530 Length = 530 Score = 1105 bits (2859), Expect = 0.0, Method: Compositional matrix adjust. Identities = 530/530 (100%), Positives = 530/530 (100%) Query: 1 MPLDARSPVILHYLQNLFLIAICAAFTPFLTSIALISTLISPLITSKQIQHPLKWRTDSS 60 MPLDARSPVILHYLQNLFLIAICAAFTPFLTSIALISTLISPLITSKQIQHPLKWRTDSS 60 Query: 61 KSPPRTILVTGVGMSKGLSIARSFYRAGHRVIGADFEPYYIPVSGHFSKSLRKFYRLRKP 120 KSPPRTILVTGVGMSKGLSIARSFYRAGHRVIGADFEPYYIPVSGHFSKSLRKFYRLRKP 120	
Choose your result view and select specific resu to perform further analysis	Sbiet: 61 KSPERTILVTGVGMSKGLSIARSFYRAGHRVIGADFEPYYIPVSGHFSKSLRKFYRLRKP 120 7: 121 NGKSGAEEYTRDIVNIIEKERVDLWVSCSGVASAIEDGEAAEMVQRNTKCAVVQFGVGLT 180 NGKSGAEEYTRDIVNIIEKERVDLWVSCSGVASAIEDGEAAEMVQRNTKCAVVQFGVGLT 180 10: 121 NGKSGAEEYTRDIVNIIEKERVDLWVSCSGVASAIEDGEAAEMVQRNTKCAVVQFGVGLT 180 10: 121 NGKSGAEEYTRDIVNIIEKERVDLWVSCSGVASAIEDGEAAEMVQRNTKCAVVQFGVGLT 180 10: 181 EMLHEKFAFIKYTMELGLNVPLTYRIHSCEEALEILHPENGESVDKKFIMKPEMVDDSVR 240 10: 181 EMLHEKFAFIKYTMELGLNVPLTYRIHSCEEALEILHPENGESVDKKFIMKPEMVDDSVR 240 11: 181 EMLHEKFAFIKYTMELGLNVPLTYRIHSCEEALEILHPENGESVDKKFIMKPEMVDDSVR 240 12: 181 EMLHEKFAFIKYTMELGLNVPLTYRIHSCEEALEILHPENGESVDKKFIMKPEMVDDSVR 240 14: 241 ADMTLLPSPSRTQTDTHIQKLNPALKRPFVLQQYIKGREYCTHSIVLKGKIHAFVSGRSS 300 15: 241 ADMTLLPSPSRTQTDTHIQKLNPALKRPFVLQQYIKGREYCTHSIVLKGKIHAFVSGRSS 300 16: 301 DMLMHYQALPSSSALAKAMFHYTTLVIQRAAERTPNSPITGHFSLDFLIDEEIAQKAEGS 360 17: 301 DMLMHYQALPSSSALAKAMFHYTLVIQRAAERTPNSPITGHFSLDFLIDEEIAQKAEGS 360 17: 301 DMLMHYQALPSSSALAKAMFHYTLVIQRAAERTPNSPITGHFSLDFLIDEEIAQKAEGS 360 17: 301 DMLMHYQALPSSSALAKAMFHYTLVIQRAAERTPNSPITGHFSLDFLIDEEIAQKAEGS 360 18: 301 DMLMHYQALPSSSALAKAMFHYTLVIQRAAERTPNSPITGHFSLDFLIDEEIAQKAEGS 360 19: 421 LHPSSKEVEKLQKELFPIECNPRAHTAVVLLNDSAEEMAEAYLSLSDYNTNGNGDTYLP 420 19: 421 ALQRNEDPIFPLSQAVNGGYWNGHDFVTKVLLPIFHLISFQKGITNLVREWWEFGKHVL 480 19: 421 ALQRNEDPIFPLSQAVNGGYWNGHDFVTKVLLPIFHLISFQKGITNLVREWWEFGKHVL 480 19: 421 ALQRNEDPIFPLSQAVNGGYWNGHDFVTKVLLPIFHLISFQKGITNLVREWWEFGKHVL 480 19: 481 LWKDGTYEIWDPWPAWCLYVLFLPGCFWVSIWERKWWSRCNVSTGKFFGV 530 19: 481 LWKDGTYEIWDPWPAWCLYVLFLPGCFWVSIWERKWWSRCNVSTGKFFGV 530	
	 BLASTP:temp job7 2 >BC1G_08771.1 hypothetical protein (translation) Length = 416 Score = 803 bits (2075), Expect = 0.0, Method: Compositional matrix adjust. Identities = 387/390 (99%), Positives = 389/390 (99%) Query: 1 MELDARSEVILHYLONLFLIAICAATPFLITSIALISTLISPLITSKQIQHPLKWRIDSS 60 Sbjert Physica Physica	

My Sequences





INRA

RGI

SRS: Databanks and tools





<u>F</u> ichier Éditio <u>n A</u> ffichage <u>H</u> i	storique <u>M</u> arque-page	s <u>O</u> utils Aid <u>e</u>	
🔶 👻 😂 🔶	https://gpi.versaille	es.inra.fr/srs83/analysisTools.do?databanks=userProtein&queryString=[USERF	PROTEIN:set_2_BLASTP 😭 🗸 Google
🜇 start_blast2go [A universal .	💥 👫 Analysis Tool	s 🗙	~
biowisdom [*]	Find	S∣≣ in Select ▼ Go	nlapalu logged in j <u>Start permanent</u> session
Analysis Tools [USERPROTEIN:set_2_BLASTP_temp_job	1_1]		
Quick Launch	Available Analysi	s Tools - listed by type	
Launch analysis tool : Antigenic \$ Launch Launch Packages Information BLAST	Alignment Tools Display Tools Edit Tools Information Tools Nucleic Tools Protein Tools Protein Motifs		Run further analysis on selected sequences
EMBOSS OTHER	Antigenic Digest Epestfind Fuzzpro Helixturnhelix Patmatdb Patmatmotifs Pepcoil Preg Pscan Sigcleave I Protein Compos I Protein 2D Struct Protein Mutation Similarity Search To Utils Tools	Finds antigenic sites in proteins - Launch More Info Reports on protein proteolytic enzyme or reagent cleavage sites - Launch More Info Finds PEST motifs as potential proteolytic cleavage sites - Launch More Info Search for patterns in protein sequences - Launch More Info (dentify nucleic acid-binding motifs in protein sequences - Launch More Info Searches protein sequences with a sequence motif - Launch More Info Scan a protein sequence with motifs from the PROSITE database - Launch More Info Predicts coiled coil regions in protein sequence(s) - Launch More Info Regular expression search of protein sequence(s) - Launch More Info Scans protein sequence(s) with fingerprints from the PRINTS database - Launch More Info Reports on signal cleavage sites in a protein sequence - Launch More Info ition ture	



EURGI



SRS: Databanks and tools

Job Managment



•		🖺 💽 https://	/gpi.versailles.inra	.fr/srs83/queryHistory	r.do		☆ ✓ C ✓ white wimb	ay
start_bla	st2go [A univers	sal 🗶 🔺 Q	uery History	×				
biow	isdom*	Find			SE in Select 🗸 Go			
	SKS	my SRS	query builder	analysis tools his	story - manage views - databank list - <mark>Help?</mark>	nlapalu logged in Start permanent		
uery His	tory					5551011		
	Queries (1)		Entries (5)	Tool Results	(5) Favorite Searches (0)			
		Actions	Name	Number of Entries	Query Expression			
		🎭 🛄 🢼	q22 🖵	1	[OCTANOL-JobName.temp_job8] ┶ा Raw Ouput			
		🍄 🛄 🎁	q18 🖵	1	[FREAKP-JobName.temp_job7] + Raw Ouput			
		🍫 🛄 💼	q16 🛏	1	[COMPSEQP-JobName.temp_job6] Law Ouput			
		🍫 🛄 💼	q6 🛏	2	[USERPROTEIN-JobName:set_2] + Raw Ouput			
		🍫 🛄 💼	q2 🕨	50	[BLASTP-JobName.temp_job1] + Raw Ouput			
		1.1	ko Mo	byla S	PS has a job may	agam	opt with a	
				byle, S	110 Has a jub Hai	iayenne.		
			+	OKOKU O	r normonont ocor	nion		





Thanks to ...



INRA – URGI

- Joelle Amselem
- Baptiste Brault
- Laetitia Brigitte
- Jonathan Kreplak
- Françoise Alfama
- Aminah Keliet
- Erik Kimmel
- Isabelle Luyten
- Sébastien Reboux
- Delphine Steinbach
- Hadi Quesneville

BIOGER

- Marc-Henri Lebrun
- Adeline Simon

Botrytis / Sclerotinia Genome consortium

Funding

ANR GnpInteGr ANR GnpAnnot



