

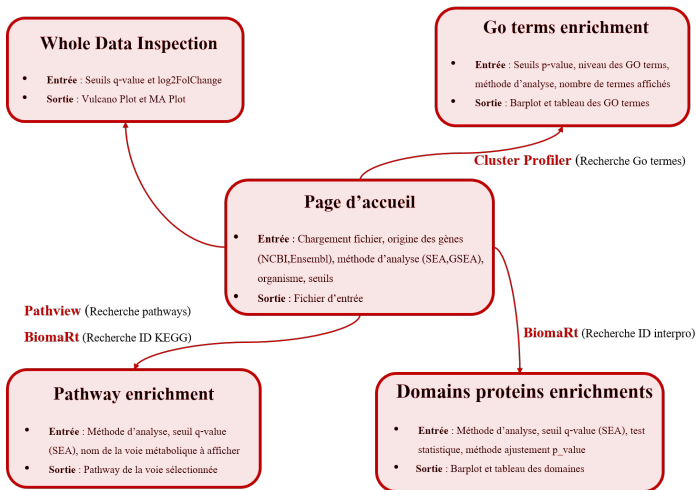


## Functional enhancement with Shiny

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Functional enhancement with Shiny

INPUT DATA

WHOLE DATA INSPECTION

GO TERM ENRICHMENT

PATHWAY ENRICHMENT

PROTEIN ENRICHMENT

SELECT THEME

default

## Shiny application for enrichment analysis

Select a file

BROWSE... Donnees\_test.csv

Upload complete

### Settings

origin gene IDs

- ☐ NCBI  
☒ Ensembl

Statistics

- ☒ GSEA  
☐ SEA

Organism Name

Human genes (GRCh38.p12)

Choice p-value and q-value

p-Value

0,05

q-Value

0,05

log 2 Fold change

0,05

START ANALYSIS

Show 10 entries

Search:

	id	baseMean	log2FoldChange	pvalue	padj	GeneName
1	ENSG00000223972	1.556	-0.247	0.348	0.588	DOX11L1
2	ENSG00000227232	231.791	-0.169	0.063	0.185	WASH7P
3	ENSG00000243485	1.405	-0.399	0.123		RP11-34P13.3
4	ENSG00000238009	20.49	0.397	0.015	0.057	RP11-34P13.7
5	ENSG00000233750	42.046	-0.096	0.42	0.655	CXCP27
6	ENSG00000237683	184.07	-0.192	0.071	0.202	
7	ENSG00000268903	11.501	-0.152	0.447	0.678	RP11-34P13.15
8	ENSG00000239906	16.623	-0.019	0.019	0.966	RP11-34P13.14
9	ENSG00000241860	129.739	-0.154	0.077	0.213	RP11-34P13.13
10	ENSG00000241599	0.406	-0.262	0.135		RP11-34P13.9

Showing 1 to 10 of 30,086 entries

Previous 1 2 3 4 5 ... 3009 Next

## Volcano Plot

Functional enhancement with Shiny

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default

## Whole Data Inspection

q-value

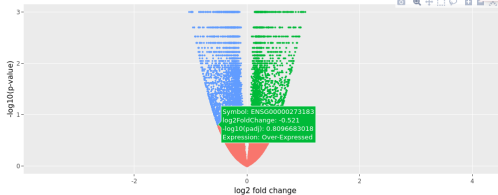
0.05

log 2 Fold change

0.05

VULCAN PLOT

MAP PLOT



- Not Significant
- Over-Expressed
- Under-Expressed

Functional enhancement with Shiny

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PATHWAY ENRICHMENT

PROTEIN ENRICHMENT

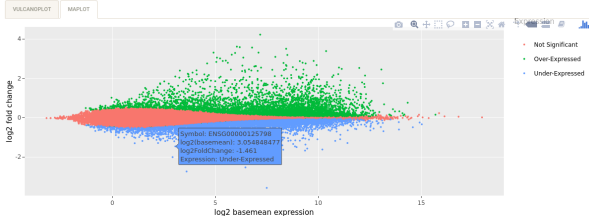
## Whole Data Inspection

q-value

0.05

log 2 Fold change

0.05



## Functional enhancement with Shiny

INPUT DATA

WHOLE DATA INSPECTION

GO TERM ENRICHMENT

PATHWAY ENRICHMENT

PROTEIN ENRICHMENT

SELECT THEME

default

## GO Term Enrichment

Go level

2

Go category

25

## Settings

Statistics

GSEA

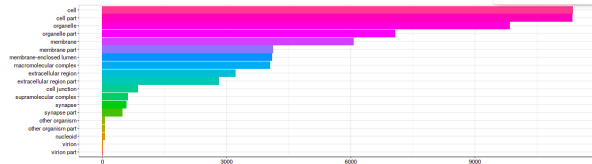
SEA

q-Value

0.05

START

DOWNLOAD



CSV

Excel

PDF

Search:

ID	Description	Count	GeneRatio
GO:0005623	cell	11359	11359/9606
GO:0044464	cell part	11349	11349/9606
GO:0043226	organelle	9841	9841/9606
GO:0044422	organelle part	7068	7068/9606
GO:0016020	membrane	6069	6069/9606
GO:0044425	membrane part	4116	4116/9606
GO:0031974	membrane-enclosed lumen	4095	4095/9606
GO:0032991	macromolecular complex	4049	4049/9606
GO:0005576	extracellular region	3215	3215/9606
GO:0044421	extracellular region part	2811	2811/9606

Showing 1 to 10 of 22 entries

Previous 1 2 3 Next

Functional enrichment with Shiny

INPUT DATA WHOLE DATA INSPECTION GO TERM ENRICHMENT PATHWAY ENRICHMENT PROTEIN ENRICHMENT

## Pathway Enrichment

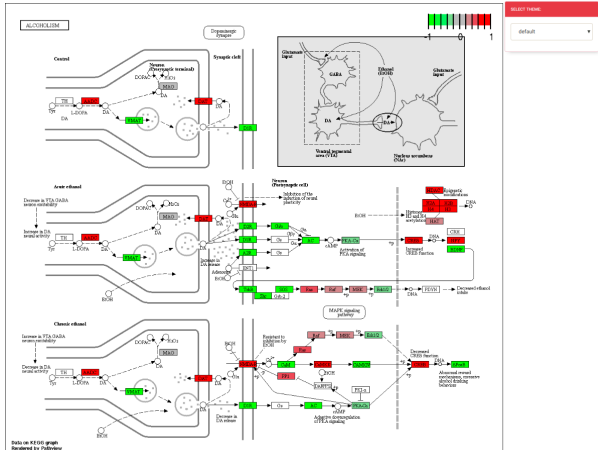
### Settings

Statistics

- GSEA
- SEA

Pathway Name

Alcoholism



Functional enhancement with Shiny

INPUT DATA

WHOLE DATA INSPECTION

GO TERM ENRICHMENT

PATHWAY ENRICHMENT

PROTEIN ENRICHMENT

SELECT THEME

default

Search:

## Protein Enrichment

Please, choose the settings and launch 'Analysis Protein'

### Adjustment

- ☐ holm
- ☐ hochberg
- ☐ hommel
- ☒ bonferroni
- ☐ BH
- ☐ BY
- ☐ fdr

### Statistics Test

- ☒ Chi2
- ☐ Fischer

p-value adj

0.05

### Statistics

- ☒ GSEA
- ☐ SEA

ANALYSIS PROTEIN

ABOUT

Show 10 entries

Domain ID	Description	Effectif	pvalue	padj
IPR000210	BTB/POZ domain	1	0.715	0.834
IPR000608	Ubiquitin-conjugating enzyme E2	1	0.077	0.128
IPR000626	Ubiquitin domain	1	0.266	0.363
IPR000742	EGF-like domain	1	0.872	0.918
IPR001073	C1q domain	1	0.054	0.093
IPR001164	Arf GTPase activating protein	1	0.031	0.057
IPR001478	PDZ domain	1	0.617	0.74
IPR001660	Sterile alpha motif domain	1	0.389	0.508
IPR001791	Laminin G domain	1	0.221	0.315
IPR001828	Receptor, ligand binding region	1	0.091	0.146

Showing 1 to 10 of 58 entries

Previous

1

2

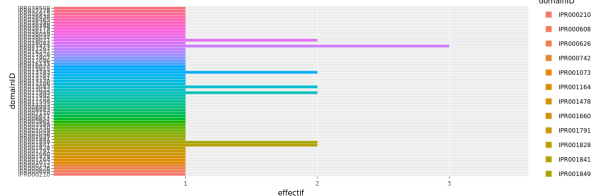
3

4

5

6

Next





## Ce qu'il reste à faire

- Généraliser à plusieurs espèces
- Optimiser au niveau temps de calcul
- Lien URL sur les ID GO et Pfam obtenus
- Plus d'explication sur chaque page