

Web services

Web services

Definition: Accessing the data programmatically

- Can do anything via a script you can do in the webapp!
- Available for all InterMines
- Free

Web services - three methods

1. Iodocs (<http://iodocs.apps.intermine.org/>)

- a. HTTP calls
- b. `GET www.flymine.org/query/service/path/values?path=Organism.name&format=json`

2. Client libraries

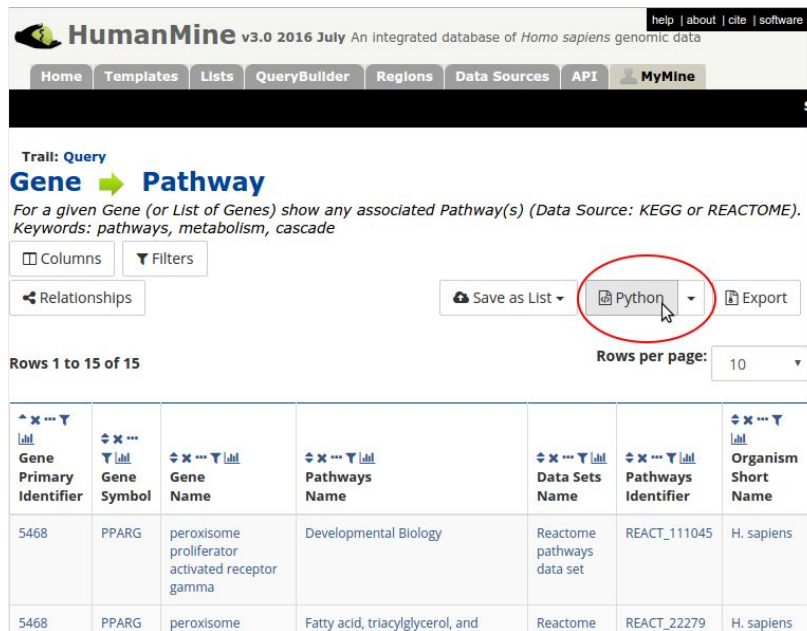
- a. Java
- b. Perl
- c. Python ← already installed locally
- d. Ruby
- e. JavaScript
- f. R (in final stages of preparation)



3. Webapp generate script

Generate Script

1. Humanmine.org templates tab
2. Filter for gene pathways
3. Run gene → pathways template
4. “Generate Python code”
5. save the file
6. open terminal
7. `$ cd /Downloads`
8. `$ chmod u+x query.py`
9. `$./query.py`



HumanMine v3.0 2016 July An integrated database of Homo sapiens genomic data

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Trail: Query
Gene → **Pathway**

For a given Gene (or List of Genes) show any associated Pathway(s) (Data Source: KEGG or REACTOME).
Keywords: pathways, metabolism, cascade

Columns Filters Relationships Save as List Python Export

Rows 1 to 15 of 15 Rows per page: 10

Gene Primary Identifier	Gene Symbol	Gene Name	Pathways Name	Data Sets Name	Pathways Identifier	Organism Short Name
5468	PPARG	peroxisome proliferator activated receptor gamma	Developmental Biology	Reactome pathways data set	REACT_111045	H. sapiens
5468	PPARG	peroxisome	Fatty acid, triacylglycerol, and	Reactome	REACT_22279	H. sapiens