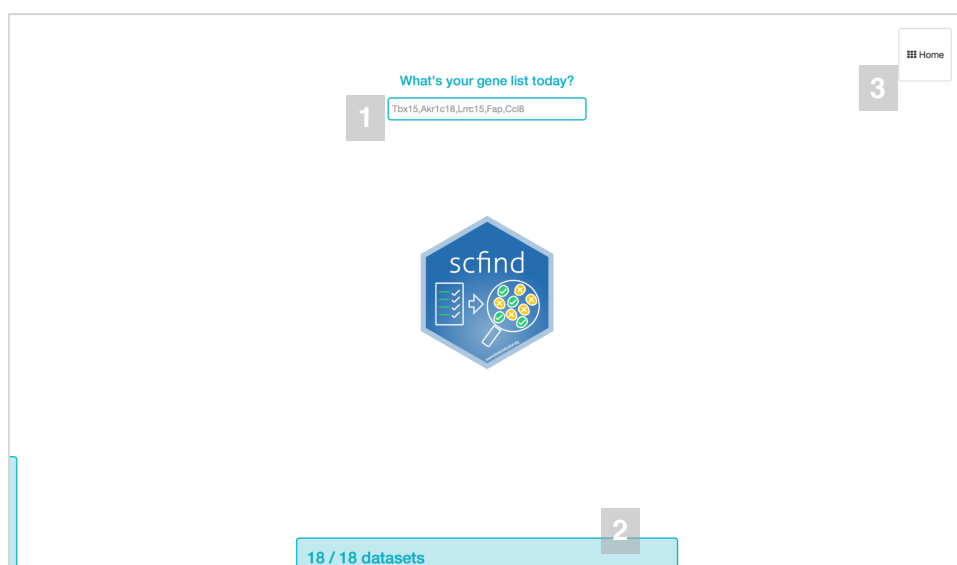




*Search engine for genes in
large single-cell sequencing collections*
<https://scfind.sanger.ac.uk/>
(User Guide)

The User interface of Scfind



- 1 Search box:**
Scfind is case-sensitive. Users can input a list of gene names, separate by commas ','
- 2 Dataset check box:**
Where the user can find all the datasets in the index and limit the search result by dataset / tissue
- 3 Home button:**
To the home page of our index collection

4 Steps : From your favorite gene list to your target cell type

I

What's your gene list today?

Ggca, Vamp8, Vamp5, Rnf181, Zbtb38, Cldn11, S

Step I: Input your favorite gene list

- The bar chart **1** is a summary of the number of cells in the index expressing the gene

- User can always amend the initial gene list by clicking on

Step II: select one of our recommended sub-query on table **2** according to TF-IDF score

- subqueries are ranked by TF-IDF score (*Highest = likely the best*)

- click on **tfidf** to sort TF-IDF score in order

II

What's your gene list today?

Ggca, Vamp8, Vamp5, Rnf181, Zbtb38, Cldn11, S

Select Genes 11 / 11

Recommended query for the initial genesets:

Genes	Query	tfidf	Cells	Cell Types	
1	2	Ggca,Rnf181	17.56	6256	32767
2	3	Ggca,Rnf181,Skil	33.65	4470	32767
3	4	Ggca,Rnf181,Skil,Vamp8	48.34	3609	32767
4	5	Ggca,Rnf181,Vamp8	32.25	4904	32767
5	2	Ggca,Skil	25.63	8062	32767
6	3	Ggca,Skil,Vamp8	35.53	5956	32767
7	2	Ggca,Vamp8	13.13	2865	32767
8	2	Ggca,Vamp8	18.44	6364	32767
9	2	Ggca,Zbtb38	10.32	3107	32767
10	2	Rnf181,Skil	78.05	11086	32767

Showing 1 to 10 of 25 entries

Previous 1 2 3 Next

16 / 18 datasets

Step II: select one of our recommended sub-query on table **2** according to TF-IDF score

- subqueries are ranked by TF-IDF score (*Highest = likely the best*)

- click on **tfidf** to sort TF-IDF score in order

III

What's your gene list today?

Ggca, Vamp8, Vamp5, Rnf181, Zbtb38, Cldn11, S

Select Genes 11 / 11

Recommended query for the initial genesets:

Genes	Query	tfidf	Cells	Cell Types	
1	2	Ggca,Rnf181	17.56	6256	32767
2	3	Ggca,Rnf181,Skil	33.65	4470	32767
3	4	Ggca,Rnf181,Skil,Vamp8	48.34	3609	32767
4	5	Ggca,Rnf181,Vamp8	32.25	4904	32767
5	2	Ggca,Skil	25.63	8062	32767
6	3	Ggca,Skil,Vamp8	35.53	5956	32767
7	2	Ggca,Vamp8	13.13	2865	32767
8	2	Ggca,Vamp8	18.44	6364	32767
9	2	Ggca,Zbtb38	10.32	3107	32767
10	2	Rnf181,Skil	78.05	11086	32767

Showing 1 to 10 of 25 entries

Previous 1 2 3 Next

16 / 18 datasets

Selected 87 cell types for Ggca, Rnf181

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	32	89	0.00054700976
BrainCerebellar cell	202	632	0
BrainNeocortex normal cell	276	656	0
BrainHippocampus dentate gyrus	1	36	1
BrainHippocampus dentate gyrus	187	4329	1
BrainNeocortex layer 4 of the cerebral cortex	26	422	1
BrainNeocortex layer 5 of the cerebral cortex	2	30	1
BrainNeocortex layer 6 of the cerebral cortex	23	150	1
BrainHippocampus dentate gyrus	101	626	1
BrainHippocampus dentate gyrus	20	166	1

Showing 1 to 10 of 104 entries

Previous 1 2 3 4 5 ... 10 Next

16 / 18 datasets

Selected 104 cell types for Vamp8, Rnf181, Skil

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	85	90	0
BrainCerebellar cell	476	632	0
BrainNeocortex normal cell	287	656	0
BrainHippocampus dentate gyrus	313	762	0
BrainCerebellar cell of cerebellum	311	1700	0
BrainCerebellar cell	466	614	0
BrainHippocampus dentate gyrus	173	500	0
BrainHippocampus dentate gyrus	226	502	0
BrainHippocampus dentate gyrus	161	287	0
BrainHippocampus dentate gyrus	217	411	0

Showing 1 to 10 of 104 entries

Previous 1 2 3 4 5 ... 11 Next

16 / 18 datasets

Step III: Select the enriched cell types on table **3**

- Cells expressing all genes in the query are grouped by cell type. The user can rank them based on enrichment by clicking on **pval**

- User can limit the dataset by clicking on in **4**

IV

What's your gene list today?

Ggca, Vamp8, Vamp5, Rnf181, Zbtb38, Cldn11, S

Select Genes 11 / 11

Recommended query for the initial genesets:

Genes	Query	tfidf	Cells	Cell Types	
12	3	Rnf181,Skil,Vamp8	117.7	8016	32767
21	2	Skil,Vamp8	68.34	10663	32767
10	2	Rnf181,Skil	78.05	11086	32767
19	2	Rnf181,Vamp8	74.29	12617	32767
20	3	Rnf181,Skil,Vamp8	89.21	3753	32767
11	3	Rnf181,Skil,Vamp8	66.86	2861	32767
15	3	Rnf181,Vamp8	63.42	3553	32767
3	4	Ggca,Rnf181,Skil,Vamp8	48.34	3609	32767
19	2	Skil,Vamp8	43.34	5005	32767
22	3	Skil,Vamp8,Zbtb38	42.7	3673	32767

Showing 1 to 10 of 25 entries

Previous 1 2 3 Next

16 / 18 datasets

Selected 104 cell types for Vamp8, Rnf181, Skil

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	85	90	0
BrainCerebellar cell	476	632	0
BrainNeocortex normal cell	287	656	0
BrainHippocampus dentate gyrus	313	762	0
BrainCerebellar cell of cerebellum	311	1700	0
BrainCerebellar cell	466	614	0
BrainHippocampus dentate gyrus	173	500	0
BrainHippocampus dentate gyrus	226	502	0
BrainHippocampus dentate gyrus	161	287	0
BrainHippocampus dentate gyrus	217	411	0

Showing 1 to 10 of 104 entries

Previous 1 2 3 4 5 ... 11 Next

16 / 18 datasets

Selected 104 cell types for Vamp8, Rnf181, Skil

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	85	90	0
BrainCerebellar cell	476	632	0
BrainNeocortex normal cell	287	656	0
BrainHippocampus dentate gyrus	313	762	0
BrainCerebellar cell of cerebellum	311	1700	0
BrainCerebellar cell	466	614	0
BrainHippocampus dentate gyrus	173	500	0
BrainHippocampus dentate gyrus	226	502	0
BrainHippocampus dentate gyrus	161	287	0
BrainHippocampus dentate gyrus	217	411	0

Showing 1 to 10 of 104 entries

Previous 1 2 3 4 5 ... 11 Next

16 / 18 datasets

Selected 104 cell types for Vamp8, Rnf181, Skil

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	85	90	0
BrainCerebellar cell	476	632	0
BrainNeocortex normal cell	287	656	0
BrainHippocampus dentate gyrus	313	762	0
BrainCerebellar cell of cerebellum	311	1700	0
BrainCerebellar cell	466	614	0
BrainHippocampus dentate gyrus	173	500	0
BrainHippocampus dentate gyrus	226	502	0
BrainHippocampus dentate gyrus	161	287	0
BrainHippocampus dentate gyrus	217	411	0

Showing 1 to 10 of 104 entries

Previous 1 2 3 4 5 ... 11 Next

16 / 18 datasets

Selected 104 cell types for Vamp8, Rnf181, Skil

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	85	90	0
BrainCerebellar cell	476	632	0
BrainNeocortex normal cell	287	656	0
BrainHippocampus dentate gyrus	313	762	0
BrainCerebellar cell of cerebellum	311	1700	0
BrainCerebellar cell	466	614	0
BrainHippocampus dentate gyrus	173	500	0
BrainHippocampus dentate gyrus	226	502	0
BrainHippocampus dentate gyrus	161	287	0
BrainHippocampus dentate gyrus	217	411	0

Showing 1 to 10 of 104 entries

Previous 1 2 3 4 5 ... 11 Next

16 / 18 datasets

Selected 104 cell types for Vamp8, Rnf181, Skil

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	85	90	0
BrainCerebellar cell	476	632	0
BrainNeocortex normal cell	287	656	0
BrainHippocampus dentate gyrus	313	762	0
BrainCerebellar cell of cerebellum	311	1700	0
BrainCerebellar cell	466	614	0
BrainHippocampus dentate gyrus	173	500	0
BrainHippocampus dentate gyrus	226	502	0
BrainHippocampus dentate gyrus	161	287	0
BrainHippocampus dentate gyrus	217	411	0

Showing 1 to 10 of 104 entries

Previous 1 2 3 4 5 ... 11 Next

16 / 18 datasets

Selected 104 cell types for Vamp8, Rnf181, Skil

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	85	90	0
BrainCerebellar cell	476	632	0
BrainNeocortex normal cell	287	656	0
BrainHippocampus dentate gyrus	313	762	0
BrainCerebellar cell of cerebellum	311	1700	0
BrainCerebellar cell	466	614	0
BrainHippocampus dentate gyrus	173	500	0
BrainHippocampus dentate gyrus	226	502	0
BrainHippocampus dentate gyrus	161	287	0
BrainHippocampus dentate gyrus	217	411	0

Showing 1 to 10 of 104 entries

Previous 1 2 3 4 5 ... 11 Next

16 / 18 datasets

Selected 104 cell types for Vamp8, Rnf181, Skil

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	85	90	0
BrainCerebellar cell	476	632	0
BrainNeocortex normal cell	287	656	0
BrainHippocampus dentate gyrus	313	762	0
BrainCerebellar cell of cerebellum	311	1700	0
BrainCerebellar cell	466	614	0
BrainHippocampus dentate gyrus	173	500	0
BrainHippocampus dentate gyrus	226	502	0
BrainHippocampus dentate gyrus	161	287	0
BrainHippocampus dentate gyrus	217	411	0

Showing 1 to 10 of 104 entries

Previous 1 2 3 4 5 ... 11 Next

16 / 18 datasets

Selected 104 cell types for Vamp8, Rnf181, Skil

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	85	90	0
BrainCerebellar cell	476	632	0
BrainNeocortex normal cell	287	656	0
BrainHippocampus dentate gyrus	313	762	0
BrainCerebellar cell of cerebellum	311	1700	0
BrainCerebellar cell	466	614	0
BrainHippocampus dentate gyrus	173	500	0
BrainHippocampus dentate gyrus	226	502	0
BrainHippocampus dentate gyrus	161	287	0
BrainHippocampus dentate gyrus	217	411	0

Showing 1 to 10 of 104 entries

Previous 1 2 3 4 5 ... 11 Next

16 / 18 datasets

Selected 104 cell types for Vamp8, Rnf181, Skil

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	85	90	0
BrainCerebellar cell	476	632	0
BrainNeocortex normal cell	287	656	0
BrainHippocampus dentate gyrus	313	762	0
BrainCerebellar cell of cerebellum	311	1700	0
BrainCerebellar cell	466	614	0
BrainHippocampus dentate gyrus	173	500	0
BrainHippocampus dentate gyrus	226	502	0
BrainHippocampus dentate gyrus	161	287	0
BrainHippocampus dentate gyrus	217	411	0

Showing 1 to 10 of 104 entries

Previous 1 2 3 4 5 ... 11 Next

16 / 18 datasets

Selected 104 cell types for Vamp8, Rnf181, Skil

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	85	90	0
BrainCerebellar cell	476	632	0
BrainNeocortex normal cell	287	656	0
BrainHippocampus dentate gyrus	313	762	0
BrainCerebellar cell of cerebellum	311	1700	0
BrainCerebellar cell	466	614	0
BrainHippocampus dentate gyrus	173	500	0
BrainHippocampus dentate gyrus	226	502	0
BrainHippocampus dentate gyrus	161	287	0
BrainHippocampus dentate gyrus	217	411	0

Showing 1 to 10 of 104 entries

Previous 1 2 3 4 5 ... 11 Next

16 / 18 datasets

Selected 104 cell types for Vamp8, Rnf181, Skil

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	85	90	0
BrainCerebellar cell	476	632	0
BrainNeocortex normal cell	287	656	0
BrainHippocampus dentate gyrus	313	762	0
BrainCerebellar cell of cerebellum	311	1700	0
BrainCerebellar cell	466	614	0
BrainHippocampus dentate gyrus	173	500	0
BrainHippocampus dentate gyrus	226	502	0
BrainHippocampus dentate gyrus	161	287	0
BrainHippocampus dentate gyrus	217	411	0

Showing 1 to 10 of 104 entries

Previous 1 2 3 4 5 ... 11 Next

16 / 18 datasets

Selected 104 cell types for Vamp8, Rnf181, Skil

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	85	90	0
BrainCerebellar cell	476	632	0
BrainNeocortex normal cell	287	656	0
BrainHippocampus dentate gyrus	313	762	0
BrainCerebellar cell of cerebellum	311	1700	0
BrainCerebellar cell	466	614	0
BrainHippocampus dentate gyrus	173	500	0
BrainHippocampus dentate gyrus	226	502	0
BrainHippocampus dentate gyrus	161	287	0
BrainHippocampus dentate gyrus	217	411	0

Showing 1 to 10 of 104 entries

Previous 1 2 3 4 5 ... 11 Next

16 / 18 datasets

Selected 104 cell types for Vamp8, Rnf181, Skil

cell_type	cell_tids	total_cells	pval
BrainCerebellar cell of cerebellum	85	90	0
BrainCerebellar cell	476	632	0
BrainNeocortex			