# Reactome Analysis Result

#### Introduction

This report summarizes the pathway analysis result created by the **Reactome Analysis Service**. For more information, visit https://www.reactome.org.

In this reports, pathways found differentially expressed at an adjusted p-value  $\leq 0.05$  are considered to be significantly regulated.

### **Analysis Overview**

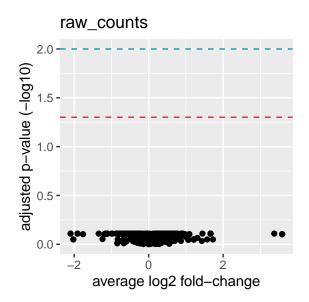
- Number of datasets analysed: 1
- Reactome version: 91
- Disease pathways were included

#### **Dataset summaries**

#### raw\_counts:

- 1248 pathways
- 169 fold changes for genes / proteins

## Pathway analysis



These volcano plots summarize the pathway results for every dataset. Every point is one pathway. The x-axis represents the average fold-change of all genes / proteins within that pathway. The y-axis represents the p-value where "higher" values are more significant (-log10 transformation). The red line represents p = 0.05, and the blue line p = 0.01.

#### Note

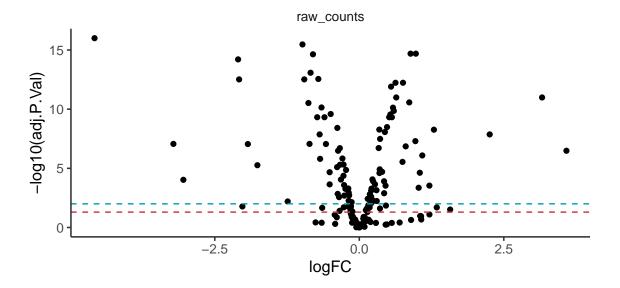
Since this result only contains a single datasets, some analyses are not included in this report.

## Top-regulated pathways

## Protein / Gene level results

Classical differential expression analysis performed on the genes / proteins of every dataset.

**Note:** Depending on the gene set analysis method used, the approach used to assess differential expression at the gene / protein level may vary to the approach used for the pathway level.



Top up-regulated protein/genes

raw\_counts

| Identifier         | $\log FC$ | AveExpr   | t        | P.Value | adj.P.Val | В        |
|--------------------|-----------|-----------|----------|---------|-----------|----------|
| ENSRNOG00000015182 | 0.9778436 | 10.498338 | 17.05090 | 0       | 0         | 27.94396 |
| ENSRNOG00000023509 | 0.8869494 | 10.060531 | 17.00594 | 0       | 0         | 27.90761 |
| ENSRNOG00000005933 | 0.6258944 | 10.524316 | 13.23823 | 0       | 0         | 20.97864 |
| ENSRNOG00000047466 | 0.7558922 | 10.065311 | 13.21190 | 0       | 0         | 20.95855 |
| ENSRNOG00000019400 | 0.5493357 | 12.114474 | 12.79059 | 0       | 0         | 20.04864 |
| ENSRNOG00000021817 | 3.1620901 | 3.677477  | 11.71998 | 0       | 0         | 19.16804 |
| ENSRNOG00000059381 | 0.6394522 | 9.788783  | 11.70495 | 0       | 0         | 17.82648 |
| ENSRNOG00000008180 | 0.8643211 | 7.448377  | 11.23133 | 0       | 0         | 17.26863 |
| ENSRNOG00000051170 | 0.5830063 | 12.049730 | 10.69150 | 0       | 0         | 15.46024 |
| ENSRNOG00000009495 | 0.5969325 | 9.696374  | 10.39527 | 0       | 0         | 14.87211 |
|                    |           |           |          |         |           |          |

## Top down-regulated protein/genes

raw\_counts

| Identifier         | $\log FC$  | AveExpr   | t         | P.Value | adj.P.Val | В        |
|--------------------|------------|-----------|-----------|---------|-----------|----------|
| ENSRNOG00000001254 | -4.5802817 | 5.946326  | -19.91237 | 0       | 0         | 33.24932 |
| ENSRNOG00000038686 | -0.9828336 | 9.498773  | -18.60282 | 0       | 0         | 30.56622 |
| ENSRNOG00000020440 | -0.8015616 | 10.090671 | -16.79323 | 0       | 0         | 27.56995 |
| ENSRNOG00000010645 | -2.0968838 | 6.860696  | -16.08702 | 0       | 0         | 27.16011 |
| ENSRNOG00000003897 | -0.8429220 | 18.884965 | -14.52511 | 0       | 0         | 23.55911 |
| ENSRNOG00000011589 | -0.7084904 | 10.682087 | -13.80515 | 0       | 0         | 22.10447 |
| ENSRNOG00000033835 | -2.0793310 | 6.297096  | -13.64354 | 0       | 0         | 22.73536 |
| ENSRNOG00000018524 | -0.9517930 | 8.884146  | -13.66454 | 0       | 0         | 22.12940 |
| ENSRNOG00000052499 | -0.8801850 | 8.327762  | -11.14939 | 0       | 0         | 16.93112 |
| ENSRNOG00000011302 | -0.6538737 | 9.542663  | -10.73229 | 0       | 0         | 15.70281 |