



PROTEOME™ (HumanPSD™+TRANSPATH®) release 2022.1

The Human Proteome Survey Database (HumanPSD™) with focus on human proteins as disease biomarkers and drug targets contains these new features:

- **Quantitative tissue expression diagram in human locus reports**

Normalized transcript expression levels from Human Protein Atlas (v20) are displayed in a histogram across 61 different cell types / tissues. There are several sorting and grouping options, e.g. cell/tissue by organ. In addition, a value for the relative tissue specificity as indicator for expression ubiquity of the respective human gene is given.

- **Extended options to use search results as input for further queries**

The added options include the possibilities to query for drugs approved or under research for a certain condition from a search result of diseases and vice versa.

- **Biomarker and drug target data update**

The number of disease annotations increased to 369,215 and the number of unique gene/biomarker - disease assignments to 126,804. Targets for FDA - approved drugs have been added by manual curation and the number of drug - target protein associations is now 51,827.

The TRANSPATH® database on mammalian signal transduction and metabolic pathways contains these new data features:

- **Increase in number of reactions**

57,268 new binding reactions from recent publications between proteins in human and mouse have been added, among them e.g. from the brain and kidney interactome.

- **Update of links to Wikipathways and Reactome**

Links from genes/proteins to the pathway databases Wikipathways (20220110) and Reactome (v78) have been updated.