

Supplementary Information Figure 1 (SI Figure1).

Complete schema of LymPHOS2 database showing all tables and fields. Information in the database is arranged in five main groups of tables/classes:

Red and **Orange**: Main experimental data obtained by mass spectrometry and resulting from multiple proteomics search engines and data integration by the Integrator program.

Green: Protein data associated with the experimental data.

Yellow: Quantitative analysis data related to the experimental data, obtained after the statistical treatment and processing of the quantitative experimental data by the PQuantifier program.

Blue: Description of experiments, experimental groups and experimental procedures.

Gray: Accessory tables/classes related to the database management.

Updates from LymPHOS (Ovelleiro, D. et al. (2009) *Proteomics*, 9, 3741-3751):

All accessory tables are of new creation to facilitate the internal control (*lymphos_events*, *lymphos_version*) and management (*lymphos_users*) of the database.

The database core has new tables with quantitative information:

- *lymphos_dataquant*

Quantitative data for each spectrum in each experiment.

- *lymphos_quantpepexpond*

Statistics parameters of the quantitative measurements, for each peptide in each condition.

Includes *t*-test outcome on the evaluation of a change, as well as the *p*-value and the adjusted *p*-value provided by DanteR analysis.

Former *phosphosites* table is now included in table *lymphos_data*.

Former *conditions* table is now extended in three new tables:

- *lymphos_experiments*

Basic experimental data, with a record for each experiment.

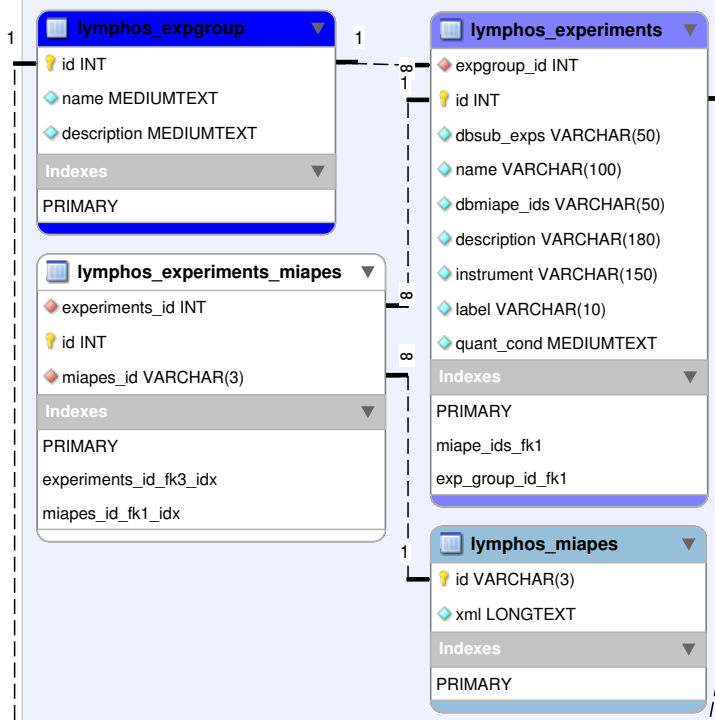
- *lymphos_expgroup*

The experimental group table, or conditions table, to group closely related experiments.

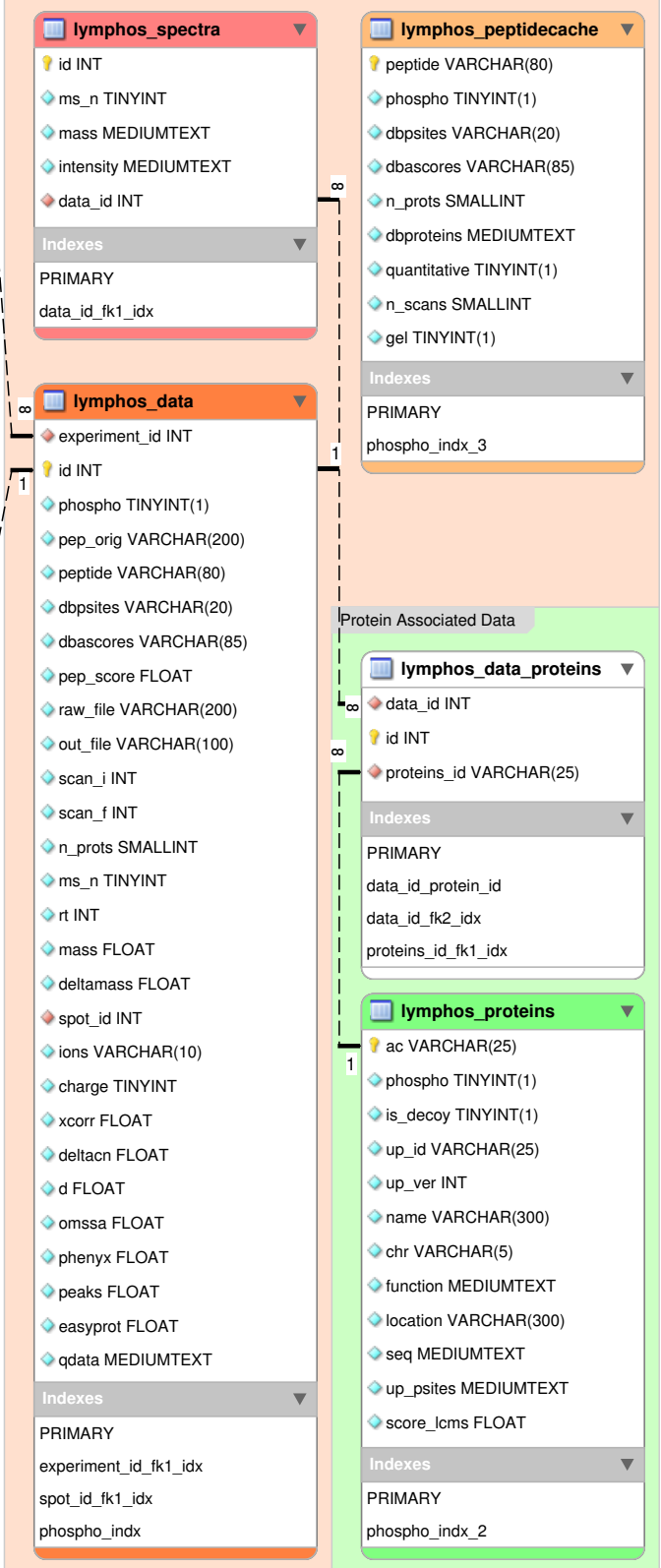
- *lymphos_miapes*

For the experimental information according to HUPO-PSI MIAPE guidelines.

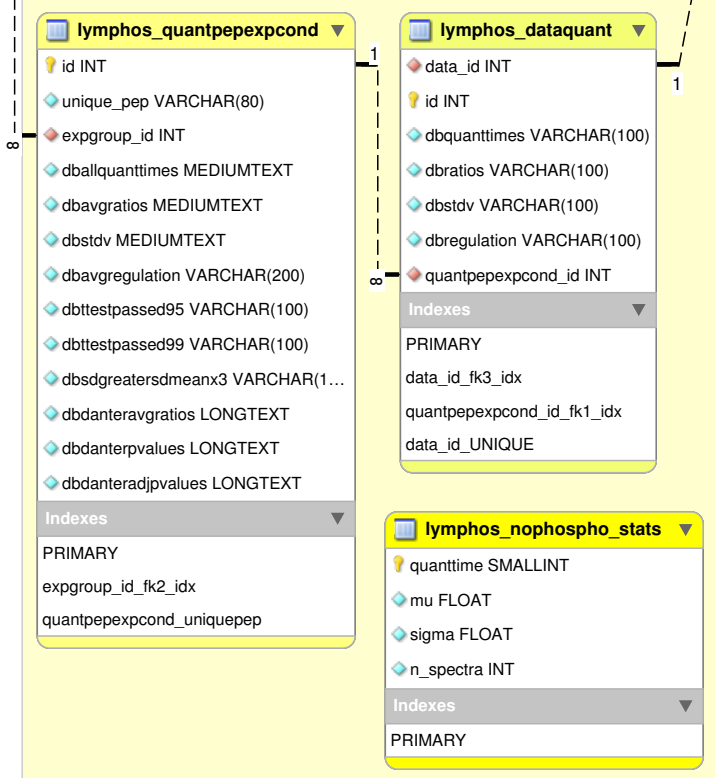
Experimental Design



Main Experimental Data



Quantitative Analysis Data



Database related

