Follow-up analysis on proximity labeling of AGO2 interacting proteins

August 8, 2017

Updates

The stringency on filtering was loosened to accommodate more proteins in the analysis. We now require **ONLY ONE** quantification in the AGO2 group, allowing proteins without any measurements in the control to be included.

Results

Data Tables

Added CNOT1 to the list of known candidates.

Table 1: Summary statistics on the processed samples

Samples	# protein groups identified	# proteins after valid values filtering	# missing values imputed	% imputed out of total post-filter
ctrl.APEX.bR01	1285	483	24	5
AGO2.APEX.bR01	1285	483	0	0
ctrl.BirA.bR01	1285	716	374	52.2
AGO2.BirA.bR01	1285	716	171	23.9
ctrl.BirA.bR02	1285	716	447	62.4
AGO2.BirA.bR02	1285	716	201	28.1

Data Exploration

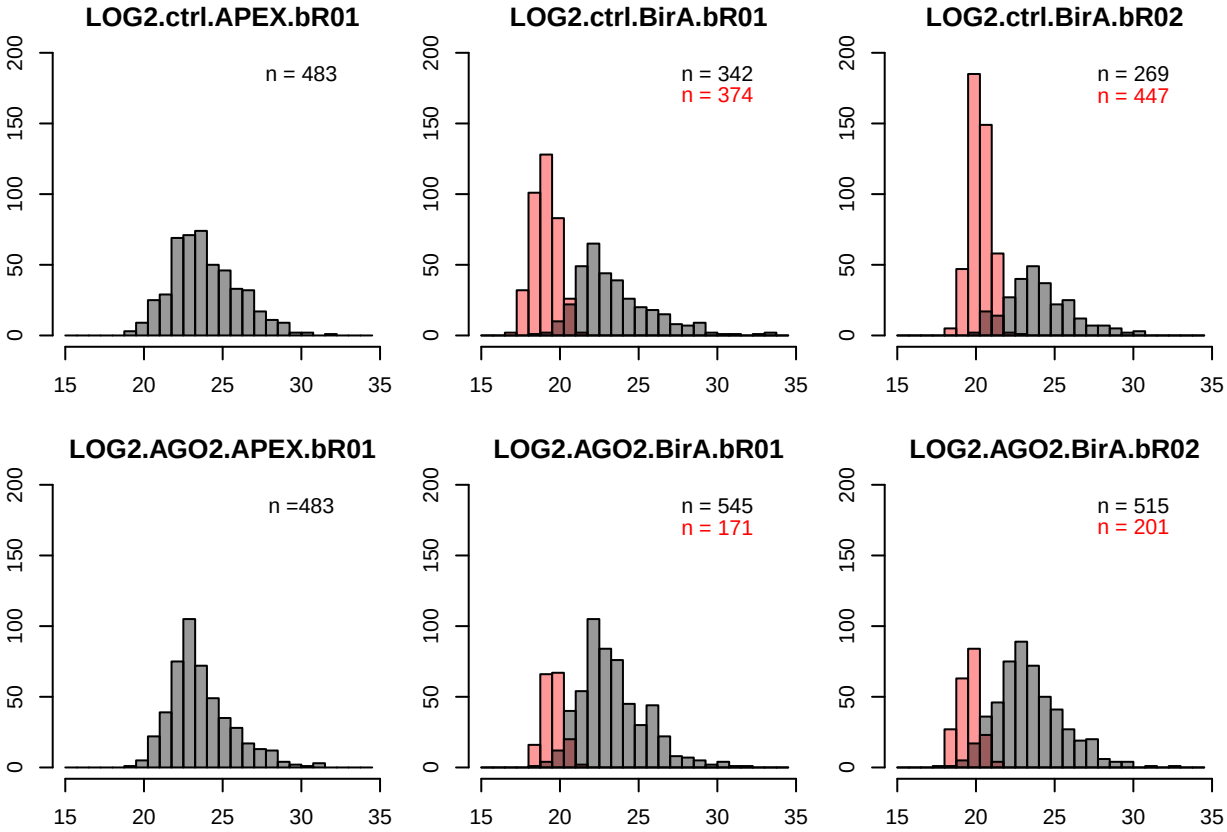

Figure 1: Histogram of logarithmized LFQ intensities by sample.

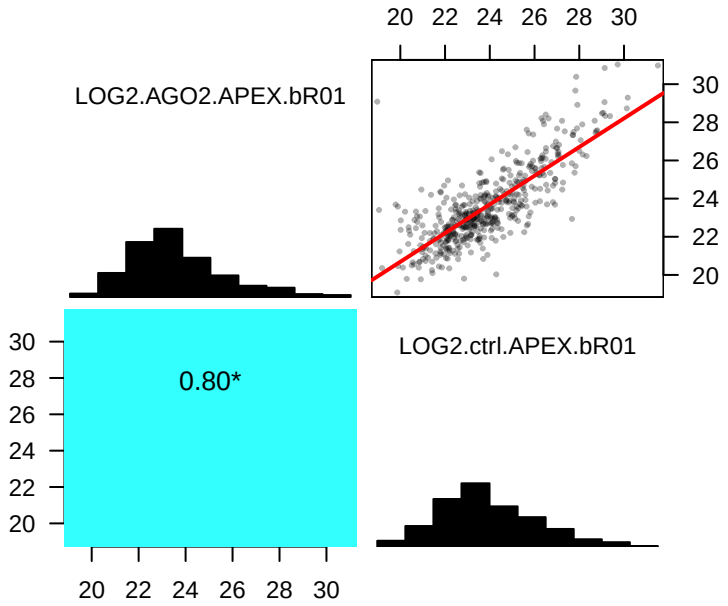

Figure 2: Correlation between APEX sample runs after data filtering.

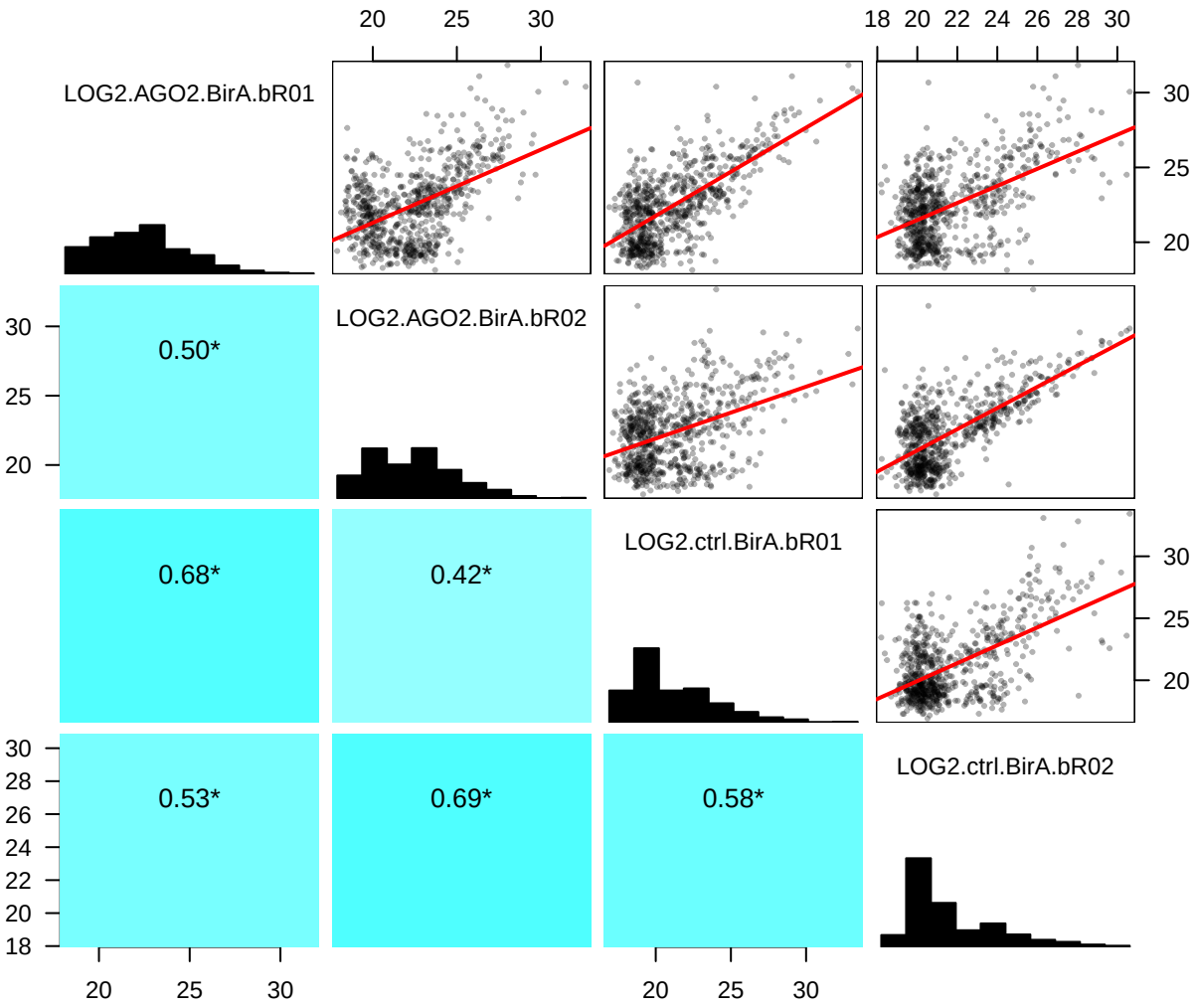

Figure 3: Correlations between BirA sample runs after data filtering and imputation.

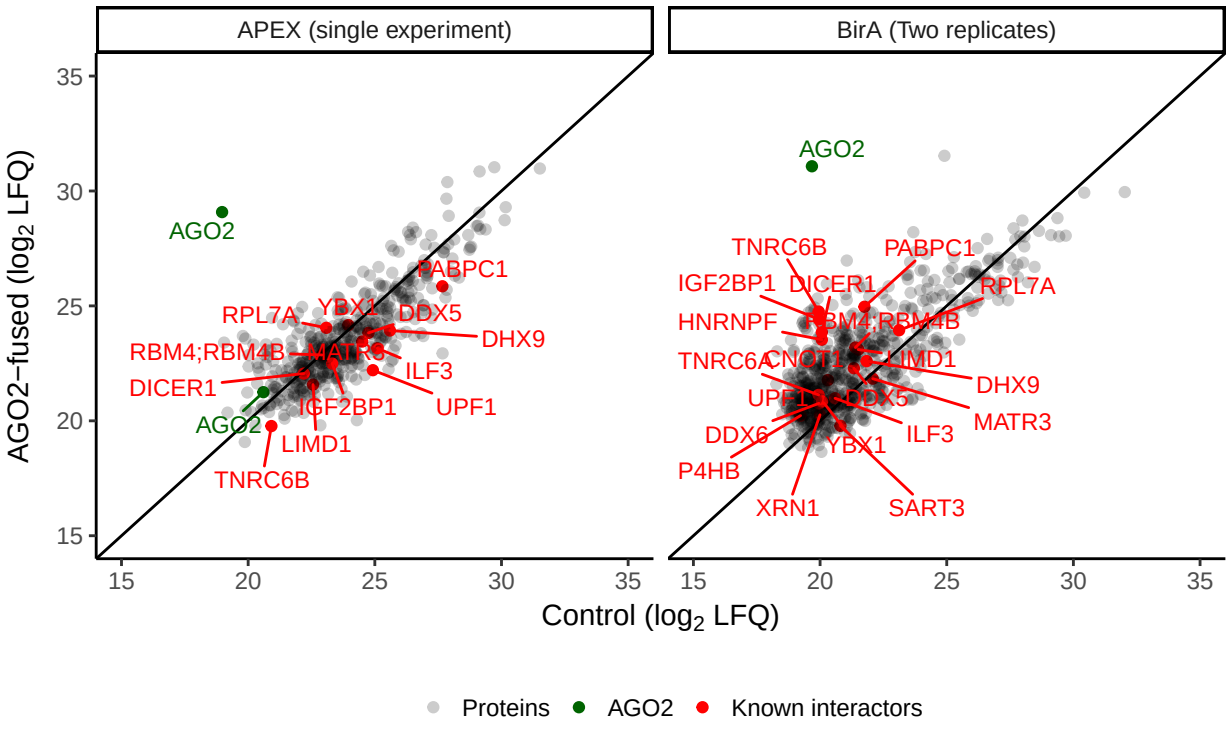

Figure 4: Scatter plot of the mean $\log_2$ LFQ for proteins labeled in AGO2 vs control group.

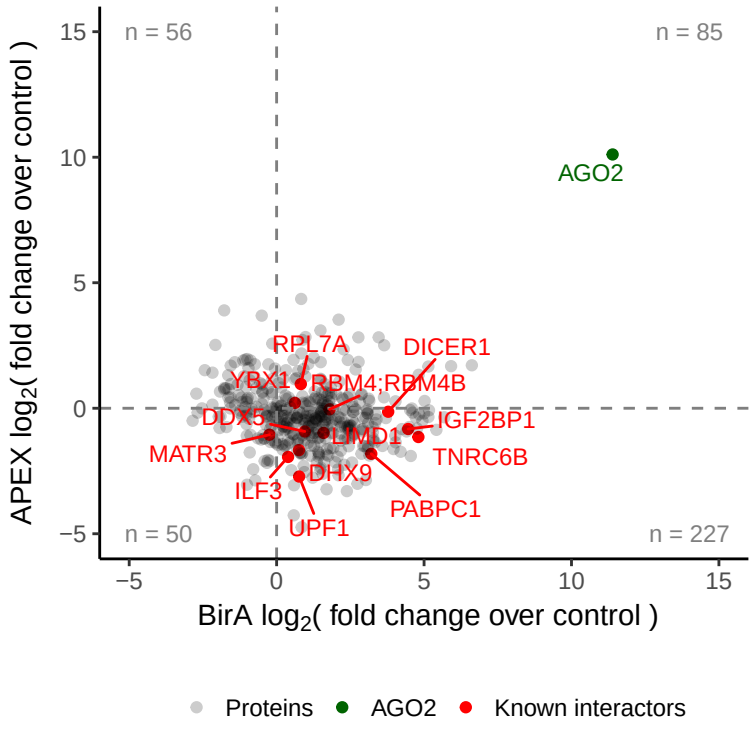

Figure 5: Comparison of protein enrichment in APEX vs BirA labeling.

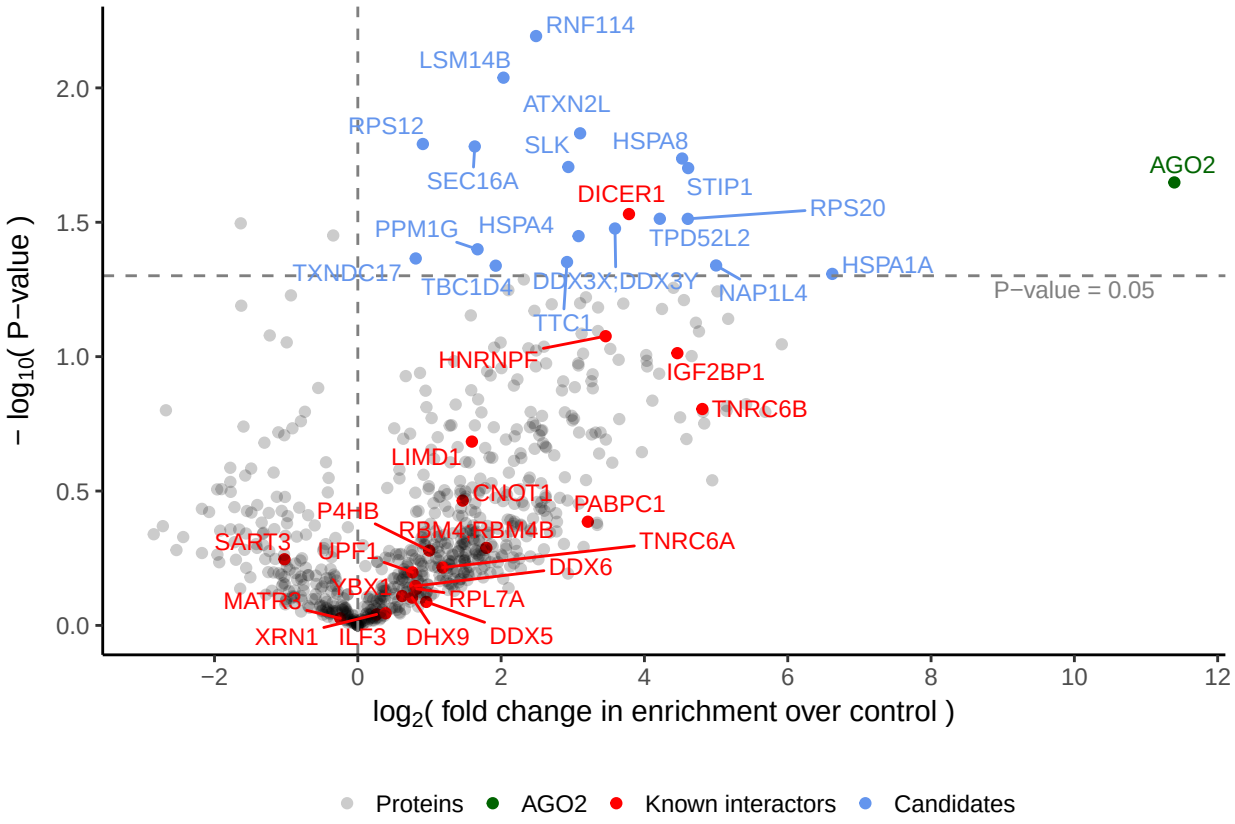

Figure 6: Volcano plot of $\log_2$ LFQ differences between AGO2-BirA and BirA control labeling.