**LateX code for GO Panther 10% Training Size**

**Panther Pathways**

All Positive Predicted Genes

\begin{table}[]

\begin{tabular}{llllllll}

Analysis Type: & PANTHER Overrepresentation Test (Released 20171205) & & & & & & \\

Annotation Version and Release Date: & PANTHER version 13.1 Released 2018-02-03 & & & & & & \\

Analyzed List: & upload\\_1 (Saccharomyces cerevisiae) & & & & & & \\

Reference List: & Saccharomyces cerevisiae (all genes in database) & & & & & & \\

Test Type: & FISHER & & & & & & \\

PANTHER Pathways & Saccharomyces cerevisiae - REFLIST (6722) & upload\\_1 (390) & upload\\_1 (expected) & upload\\_1 (over/under) & upload\\_1 (fold Enrichment) & upload\\_1 (raw P-value) & upload\\_1 (FDR) \\

DNA replication (P00017) & 20 & 14 & 1.16 & + & 12.07 & 8.99E-10 & 6.74E-08 \\

General transcription regulation (P00023) & 25 & 15 & 1.45 & + & 10.34 & 1.07E-09 & 5.33E-08 \\

Transcription regulation by bZIP transcription factor (P00055) & 31 & 18 & 1.8 & + & 10.01 & 3.29E-11 & 4.93E-09 \\

Wnt signaling pathway (P00057) & 39 & 12 & 2.26 & + & 5.3 & 1.41E-05 & 4.23E-04 \\

Ubiquitin proteasome pathway (P00060) & 41 & 12 & 2.38 & + & 5.04 & 2.14E-05 & 5.36E-04 \\

Unclassified (UNCLASSIFIED) & 6121 & 321 & 355.13 & - & 0.9 & 1.53E-07 & 5.73E-06

\end{tabular}

\end{table}

False Negative Genes

\begin{table}[]

\begin{tabular}{llllllll}

Analysis Type: & PANTHER Overrepresentation Test (Released 20171205) & & & & & & \\

Annotation Version and Release Date: & PANTHER version 13.1 Released 2018-02-03 & & & & & & \\

Analyzed List: & upload\\_1 (Saccharomyces cerevisiae) & & & & & & \\

Reference List: & Saccharomyces cerevisiae (all genes in database) & & & & & & \\

Test Type: & FISHER & & & & & & \\

PANTHER Pathways & Saccharomyces cerevisiae - REFLIST (6722) & upload\\_1 (495) & upload\\_1 (expected) & upload\\_1 (over/under) & upload\\_1 (fold Enrichment) & upload\\_1 (raw P-value) & upload\\_1 (FDR) \\

Unclassified (UNCLASSIFIED) & 6121 & 405 & 450.74 & - & 0.9 & 9.45E-10 & 1.42E-07

\end{tabular}

\end{table}

False Positive Genes

\begin{table}[]

\begin{tabular}{llllllll}

Analysis Type: & PANTHER Overrepresentation Test (Released 20171205) & & & & & & \\

Annotation Version and Release Date: & PANTHER version 13.1 Released 2018-02-03 & & & & & & \\

Analyzed List: & upload\\_1 (Saccharomyces cerevisiae) & & & & & & \\

Reference List: & Saccharomyces cerevisiae (all genes in database) & & & & & & \\

Test Type: & FISHER & & & & & & \\

PANTHER Pathways & Saccharomyces cerevisiae - REFLIST (6722) & upload\\_1 (180) & upload\\_1 (expected) & upload\\_1 (over/under) & upload\\_1 (fold Enrichment) & upload\\_1 (raw P-value) & upload\\_1 (FDR) \\

Wnt signaling pathway (P00057) & 39 & 8 & 1.04 & + & 7.66 & 2.41E-05 & 3.62E-03

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