S4 Table. PANTHER overrepresentation test for cellular components.

PANTHER Cellular Component (GO Category) <sup>1</sup>	Total <i>P.</i> falciparum proteins per category	Total proteins in K13 IP list <sup>2</sup>	Expected number of proteins in K13 IP list <sup>3</sup>	3 Fold enrichment <sup>4</sup>	p value <sup>5</sup>	False discovery rate
Oxidoreductase complex (GO:1990204)	5	4	0.15	26	8.3E-05	2.1E-03
Apical part of cell (GO:0045177)	5	3	0.15	20	1.3E-03	2.6E-02
Mitochondrial protein complex (GO:0098798)	9	4	0.27	15	4.3E-04	1.0E-02
Cytosolic small ribosomal subunit (GO:0022627)	35	10	1.1	9.4	5.1E-07	1.6E-05
Cytosolic ribosome (GO:0022626)	82	14	2.5	5.6	6.7E-07	1.9E-05
Cytosolic part (GO:0044445)	98	16	3.0	5.4	1.8E-07	6.0E-06
Cytosol (GO:0005829)	250	34	7.6	4.5	9.2E-13	3.6E-11
Mitochondrion (GO:0005739)	77	9	2.4	3.8	9.2E-04	2.0E-02
Cytoplasmic part (GO:0044444)	579	56	18	3.2	5.7E-15	2.9E-13
Cell (GO:0005623)	1008	87	31	2.8	7.3E-22	2.2E-19
Cell part (GO:0044464)	1004	86	31	2.8	2.5E-21	3.9E-19
Intracellular (GO:0005622)	940	79	29	2.8	1.2E-18	1.2E-16
Cytoplasm (GO:0005737)	859	72	26	2.8	1.4E-16	8.3E-15
Intracellular part (GO:0044424)	905	75	28	2.7	3.7E-17	2.8E-15

<sup>&</sup>lt;sup>1</sup>Refers to GO-Slim Cellular Component database from PANTHER version 14.1 (http://pantherdb.org). Released 2019-03-12.

<sup>&</sup>lt;sup>2</sup>Immunoprecipitated proteins are listed in Table 1 or S3 Table. Of the 173 listed in those tables, 166 were assigned to GO categories by PANTHER.

<sup>&</sup>lt;sup>3</sup>This calculation was based on the PANTHER estimation of 5,500 *P. falciparum* proteins. This is similar to the lower estimate of 4,800 proteins in the Malaria Parasite Metabolic Pathways database (http://mpmp.huji.ac.il).

<sup>&</sup>lt;sup>4</sup>Enrichment was calculated as the number of proteins identified in the K13 IP list divided by the number expected if the IP output were random.

<sup>&</sup>lt;sup>5</sup>Overrepresentation was determined by Fisher's exact tests with false discovery rate controls.

GO, gene ontology; IP, immunoprecipitation.