

Supplementary Information

Table S1. iTRAQ ratios for detected serum proteins in malaria-infected patients (*P. knowlesi*, *P. falciparum* and *P. vivax*) relative to uninfected controls.

| Protein | M1/C1 | M2/C1 | M3/C1 |
|---|--------------|--------------|--------------|
| Haptoglobin | 0.540 | 0.633 | 0.435 |
| C-reactive protein isoform 2 | 3.243 | 2.154 | 1.925 |
| Cell adhesion molecule-4 | 6.386 | 3.688 | 9.760 |
| Serum albumin | 1.385 | 1.308 | 1.228 |
| Alpha-1-antitrypsin | 1.014 | 1.173 | 1.466 |
| Alpha-1-acid glycoprotein 1 | 1.076 | 1.237 | 1.317 |
| Serotransferrin | 0.672 | 1.060 | 0.675 |
| Complement C3 | 0.729 | 0.853 | 0.792 |
| Ig gamma-1 chain C | 0.726 | 0.853 | 0.687 |
| Hemopexin | 1.217 | 1.180 | 1.356 |
| Ig gamma-2 chain C region | 0.759 | 0.700 | 0.764 |
| Ig lambda-2 chain C regions | 0.680 | 0.860 | 0.684 |
| Ceruloplasmin | 0.745 | 0.777 | 0.694 |
| Alpha-1-acid glycoprotein 2 | 0.911 | 1.471 | 1.442 |
| Alpha-2-macroglobulin | 0.772 | 0.827 | 0.887 |
| Ig kappa chain C region | 0.713 | 0.810 | 0.731 |
| Apolipoprotein A-I | 0.702 | 0.681 | 1.371 |
| Isoform 1 of Diacylglycerol kinase delta | 0.890 | 0.716 | 0.825 |
| Alpha-2-HS-glycoprotein | 1.370 | 1.264 | 1.255 |
| Alpha-1B-glycoprotein | 0.684 | 0.811 | 1.017 |
| Ig alpha-2 chain C region | 0.948 | 0.782 | 0.879 |
| Hemoglobin subunit delta | 1.086 | 1.462 | 0.721 |
| Mothers against decapentaplegic homolog 7 | 0.849 | 0.698 | 0.797 |
| Myosin-8 | 1.407 | 0.838 | 1.133 |
| Utrophin | 1.237 | 1.447 | 1.471 |
| Ig mu heavy chain disease protein | 1.485 | 1.419 | 1.475 |
| Isoform 3 of Microtubule-actin cross-linking factor 1 | 1.415 | 1.492 | 1.320 |
| Centromere protein F | 1.339 | 1.281 | 0.728 |
| Transient receptor potential cation channel subfamily M member 7 | 0.979 | 1.029 | 1.419 |
| Isoform 2 of Mediator of RNA polymerase II transcription subunit 24 | 1.244 | 1.312 | 1.180 |
| Isoform 2 of Shugoshin-like 2 | 1.457 | 1.404 | 1.330 |
| cDNA FLJ58155 | 1.345 | 0.928 | 1.369 |
| Isoform Short of Myosin-IXb | 1.173 | 1.179 | 1.450 |
| Potassium voltage-gated channel subfamily A member 3 | 0.843 | 0.770 | 1.084 |
| WD repeat-containing protein 87 | 1.494 | 1.077 | 0.840 |
| Isoform 6 of Tumor protein 63 | 1.332 | 1.383 | 1.440 |
| Ubiquitin carboxyl-terminal hydrolase | 0.742 | 1.479 | 0.892 |
| Isoform 3 of Dynein heavy chain 2, axonema | 0.758 | 1.183 | 0.888 |
| Serine/threonine-protein kinase PLK2 | 0.848 | 1.321 | 0.691 |
| Zinc finger protein 726 | 1.111 | 1.123 | 1.085 |
| Ankyrin repeat and SOCS box protein 18 | 0.706 | 0.852 | 0.841 |
| RNA polymerase II elongation factor ELL3 | 1.469 | 1.419 | 0.896 |
| Isoform 4 of Disks large homolog 5 | 0.890 | 0.909 | 1.216 |

Table S1. *Cont.*

| Protein | M1/C1 | M2/C1 | M3/C1 |
|---|--------------|--------------|--------------|
| ERC protein 2 | 1.233 | 1.146 | 1.498 |
| Partner and localizer of BRCA2 | 1.415 | 1.348 | 0.749 |
| Beta-1,3-galactosyl-O-glycosyl-glycoprotein beta-1,6-N-acetylglucosaminyltransferase 7 | 0.746 | 0.739 | 0.716 |
| Isoform 3 of Guanine nucleotide exchange factor VAV2 | 0.885 | 1.327 | 1.372 |
| Ankyrin repeat domain-containing protein 35 | 0.742 | 0.745 | 0.732 |
| Diphosphoinositol polyphosphate phosphohydrolase 2 | 1.461 | 1.018 | 1.493 |
| Isoform 3 of Alpha-1,6-mannosylglycoprotein 6-beta-N-acetylglucosaminyltransferase B | 0.708 | 0.751 | 0.791 |
| Bone morphogenetic protein receptor type-1A | 0.737 | 0.816 | 0.799 |
| MCM10 minichromosome maintenance deficient 10 | 0.724 | 0.952 | 0.742 |
| Isoform 3 of Phosphatidylinositol 3,4,5-trisphosphate-dependent Rac exchanger 2 protein | 0.821 | 0.757 | 0.992 |
| Isoform 2 of Neuralized-like protein 1A | 1.285 | 1.022 | 1.127 |
| MXD4 protein | 1.300 | 1.496 | 0.928 |
| Cyclin-dependent kinase 13 | 1.323 | 1.402 | 1.276 |
| Discs, large homolog 4 (Drosophila), isoform CRA_b | 1.224 | 1.446 | 1.112 |
| RAF proto-oncogene serine/threonine-protein kinase | 0.770 | 0.769 | 0.737 |
| Isoform 2 of tRNA modification GTPase GTPBP3, mitochondrial | 1.069 | 1.480 | 1.344 |
| Isoform 3 of Bromodomain containing protein 3 | 1.472 | 1.785 | 1.317 |
| Zinc finger ZZ-type and EF-hand domain-containing protein 1 | 0.827 | 0.888 | 0.890 |
| SCL/TAL1 interrupting locus (Fragment) | 0.796 | 1.003 | 1.133 |
| Isoform 2 of Chondrosarcoma-associated gene 2/3 protein | 1.481 | 1.200 | 1.496 |
| Kyphoscoliosis peptidase | 0.763 | 0.733 | 0.722 |
| Homeobox protein Hox-A7 | 1.113 | 0.711 | 0.725 |
| Recombining binding protein suppressor of hairless (Drosophila)-like cDNA FLJ58169, highly similar to Anaphase-promoting complex subunit 2 (APC2) (Cyclosome subunit 2) | 0.686 | 0.990 | 0.739 |
| Intelectin-1 | 0.950 | 1.376 | 1.433 |
| C-myc promoter-binding protein | 1.261 | 0.723 | 1.442 |
| AP-4 complex subunit epsilon-1 | 0.720 | 1.236 | 1.459 |
| Protein FAM55D | 1.131 | 1.234 | 1.222 |
| Isoform 3 of Zinc finger CCCH-type antiviral protein 1 | 1.209 | 1.201 | 1.173 |
| Breakpoint cluster region protein | 1.342 | 0.872 | 1.353 |
| Dynein heavy chain 3, axonemal | 1.495 | 1.040 | 1.138 |
| Dynein heavy chain 3, axonemal | 1.003 | 1.452 | 1.236 |
| T-complex protein 10A homolog 2 | 0.744 | 0.723 | 0.725 |
| Solute carrier family 35 member D3 | 0.712 | 0.890 | 0.819 |
| DnaJ homolog subfamily C member 2 | 0.917 | 1.485 | 0.877 |
| Serine/threonine-protein kinase 3 | 1.223 | 1.421 | 1.122 |
| Alpha-1-antichymotrypsin | 0.785 | 0.777 | 0.845 |
| Isoform 2 of Putative disintegrin and metalloproteinase domain-containing protein 5 | 1.466 | 1.267 | 0.709 |
| Isoform 3 of Zinc finger protein 714 | 0.685 | 0.690 | 0.766 |
| Isoform 2 of Dedicator of cytokinesis protein 4 | 0.706 | 0.789 | 1.263 |
| NUP153 variant protein (Fragment) | 0.720 | 0.824 | 0.830 |

Table S1. *Cont.*

| Protein | M1/C1 | M2/C1 | M3/C1 |
|--|-------|-------|-------|
| STXBP5 protein | 0.865 | 1.159 | 1.043 |
| Isoform 2 of Collagen alpha-1(VII) chain | 1.351 | 0.999 | 0.861 |
| Polypeptide N-acetylgalactosaminyltransferase 13 | 0.680 | 0.868 | 1.239 |
| Coiled-coil domain-containing protein 122 | 0.926 | 0.683 | 0.867 |
| Probable E3 ubiquitin-protein ligase makorin-3 | 1.336 | 1.222 | 1.120 |
| EMILIN-3 | 0.800 | 0.945 | 0.710 |
| Isoform 2 of Probable Xaa-Pro aminopeptidase 3 | 1.238 | 1.431 | 0.705 |
| Isoform 3 of Kynurenine 3-monooxygenase | 0.750 | 1.184 | 0.769 |
| Isoform 2 of Sodium-coupled neutral amino acid transporter 2 | 0.866 | 0.769 | 0.885 |
| Isoform 2 of Rap guanine nucleotide exchange factor 3 | 1.138 | 1.378 | 0.839 |
| Baculoviral IAP repeat-containing protein 6 | 1.131 | 1.175 | 1.441 |
| Isoform 3 of RING finger protein 17 | 0.691 | 0.791 | 0.687 |
| Hsp90 co-chaperone Cdc37 | 0.782 | 0.899 | 1.122 |
| Transmembrane protein C20orf46 | 0.965 | 0.776 | 0.820 |
| Isoform 2 of Brevican core protein | 0.849 | 1.255 | 1.411 |
| Zinc finger and SCAN domain-containing protein 5B | 1.119 | 1.139 | 1.277 |
| Thyroid hormone receptor interacting protein 6 isoform 3 | 0.756 | 1.093 | 0.786 |
| Neuropilin and tolloid-like protein 2 | 0.696 | 0.779 | 0.682 |
| Isoform 2 of IQ domain-containing protein C | 1.450 | 1.278 | 1.405 |
| Isoform 2 of Solute carrier family 45 member 4 | 1.257 | 1.356 | 1.367 |
| Putative ATP-binding domain-containing protein 3-like protein | 1.307 | 0.715 | 1.255 |
| Rho guanine nucleotide exchange factor 37 | 1.436 | 0.842 | 0.805 |
| Isoform 2 of Vacuolar protein sorting-associated protein 13B | 0.728 | 0.780 | 1.137 |
| Isoform RMO1c of Ras-associated and pleckstrin homology domains-containing protein 1 | 0.780 | 0.774 | 0.814 |
| Isoform 2 of Uncharacterized protein CXorf57 | 1.487 | 1.481 | 1.363 |
| RNA-binding protein 27 | 0.685 | 0.674 | 0.684 |
| Isoform 2 of Ubiquitin carboxyl-terminal hydrolase 21 | 1.279 | 1.411 | 1.323 |
| Proline-rich protein 14 | 0.666 | 1.232 | 1.098 |
| Isoform 2 of Abhydrolase domain-containing protein 14B | 1.473 | 0.717 | 0.765 |
| Melanoma antigen family D, 2 | 0.868 | 0.704 | 0.751 |
| Uncharacterized protein, C9JVM2 | 0.680 | 1.096 | 1.368 |
| Uncharacterized protein, D6RBJ7 | 1.328 | 1.292 | 1.493 |
| Uncharacterized protein, E5RJ77 | 0.857 | 0.804 | 0.702 |
| Uncharacterized protein, E5RH81 | 0.777 | 0.990 | 0.888 |
| Uncharacterized protein, F5H6S8 | 0.722 | 0.816 | 0.785 |
| Uncharacterized protein, E7ETL9 | 0.744 | 0.792 | 1.320 |
| Uncharacterized protein, B4DFN3 | 0.715 | 0.748 | 0.748 |
| Uncharacterized protein, C9JEV0 | 0.704 | 0.902 | 0.794 |
| Uncharacterized protein, C2orf16, Q68DN1 | 1.232 | 1.400 | 0.707 |
| Uncharacterized protein, E7EXA6 | 1.054 | 1.356 | 1.443 |
| Uncharacterized protein, E7EVP0 | 1.409 | 1.454 | 1.354 |
| Uncharacterized protein C20orf151, Q8NC74 | 1.443 | 1.274 | 1.462 |
| Uncharacterized protein, B5ME49 | 1.024 | 1.499 | 0.756 |
| Uncharacterized protein, E7EQE3 | 1.390 | 1.415 | 1.455 |

Table S1. Cont.

| Protein | M1/C1 | M2/C1 | M3/C1 |
|--|-------|-------|-------|
| Uncharacterized protein, E7EPD1 | 1.003 | 0.832 | 0.801 |
| Uncharacterized protein, F5H315 | 0.816 | 1.247 | 0.784 |
| Uncharacterized protein, E7EMZ9 | 0.864 | 0.977 | 0.773 |
| Uncharacterized protein, F5GXQ1 | 0.922 | 1.242 | 1.279 |
| Uncharacterized protein, E9PCU0 | 0.728 | 1.027 | 0.863 |
| Uncharacterized protein, B4DIT1 | 1.333 | 1.044 | 0.854 |
| Uncharacterized protein, F5GX27 | 0.796 | 0.768 | 0.789 |
| Uncharacterized protein, F8W6U1 | 1.498 | 0.911 | 1.451 |
| Uncharacterized protein, D6RBY3 | 0.685 | 1.093 | 0.712 |
| Uncharacterized protein, B4DSH5 | 0.872 | 0.962 | 1.151 |
| Uncharacterized protein, B4DF35 | 0.789 | 0.750 | 1.419 |
| Uncharacterized protein, F5H2F9 | 1.400 | 1.432 | 1.497 |
| Uncharacterized protein, B7Z7E3 | 1.032 | 1.255 | 1.050 |
| Uncharacterized protein, C9K0F5 | 0.771 | 0.680 | 0.682 |
| Uncharacterized protein, E9PS46 | 1.335 | 0.730 | 0.968 |
| Uncharacterized protein, B7Z9J8 | 1.059 | 1.224 | 1.444 |
| Uncharacterized protein, B4E1I8 | 1.437 | 0.931 | 0.769 |
| Uncharacterized protein (fragment), B1AV70 | 0.932 | 0.922 | 0.874 |
| Uncharacterized protein, B4DQE7 | 0.843 | 0.842 | 1.346 |
| Uncharacterized protein, E7EWC8 | 1.397 | 1.363 | 1.368 |
| Uncharacterized protein, E9PRP3 | 1.463 | 1.353 | 1.338 |
| Uncharacterized protein, E9PCM3 | 1.357 | 1.119 | 0.775 |
| Uncharacterized protein, F5H2J0 | 1.338 | 1.470 | 0.827 |
| Uncharacterized protein, B7Z7H0 | 1.366 | 1.360 | 0.790 |
| Uncharacterized protein, E9PNH3 | 0.944 | 0.823 | 0.693 |

M1: *P. vivax* malaria serum; M2: *P. falciparum* malaria serum; M3: *P. knowlesi* malaria serum; C1: control serum.