Table S4. GO annotations of Pfam domains. Pfam domains participating in the 42 interaction pairs are listed together with their GO annotations and the number of instances in the 42 single-domain results.

| Pfam Domain | Domain Name       | GO Annotation                                                                 | Instances in Single-Domain Results |
|-------------|-------------------|-------------------------------------------------------------------------------|------------------------------------|
| PF00142     | Fer4_NifH         | ATP binding; oxidoreductase activity                                          | 13                                 |
| PF00160     | Pro_isomerase     | peptidyl-prolyl cis-trans isomerase activity; protein folding                 | 10                                 |
| PF05739     | SNARE             |                                                                                | 6                                  |
| PF02921     | UCR_TM            | ubiquinol-cytochrome-c reductase activity                                     | 4                                  |
| PF02331     | P35               | caspase inhibitor activity; anti-apoptosis                                    | 3                                  |
| PF02866     | Ldh_1_C           | oxidoreductase activity                                                       | 2                                  |
| PF00405     | Transferrin       | extracellular region; ferric iron binding; cellular iron ion homeostasis; iron ion transport | 2                                  |
| PF00607     | Gag_p24           | viral reproduction                                                            | 1                                  |
| PF00993     | MHC_II_alpha      | membrane; MHC class II protein complex; antigen processing and presentation; immune response | 1                                  |