**Table S8 – summary of the top 20 upregulated and downregulated Reactome pathways**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Pathway** | **Direction** | **FDR** | **Counts** |
| Metabolism of proteins (translation) | Translation | Up | 1.05 x 10-28 | 51 |
| Eukaryotic translation termination | Up | 2.18 x 10-27 | 32 |
| SRP-dependent co-translational protein targeting to membrane | Up | 2.78 x 10-27 | 34 |
| Peptide chain elongation | Up | 4.59 x 10-27 | 31 |
| Formation of a pool of free 40S subunits | Up | 1.11 x 10-26 | 32 |
| Eukaryotic Translation Elongation | Up | 1.11 x 10-26 | 31 |
| L13a-mediated translational silencing of Ceruloplasmin expression | Up | 1.90 x 10-25 | 32 |
| GTP hydrolysis and joining of the 60S ribosomal subunit | Up | 2.43 x 10-25 | 32 |
| Eukaryotic Translation Initiation | Up | 1.70 x 10-24 | 32 |
| Cap-dependent Translation Initiation | Up | 1.70 x 10-24 | 32 |
| Metabolism of RNA | rRNA processing | Up | 7.21 x 10-27 | 42 |
| rRNA processing in the nucleus and cytosol | Up | 9.89 x 10-27 | 41 |
| Nonsense Mediated Decay (NMD) independent of the Exon Junction Complex (EJC) | Up | 2.15 x 10-26 | 31 |
| Major pathway of rRNA processing in the nucleolus and cytosol | Up | 1.24 x 10-25 | 39 |
| Nonsense-Mediated Decay (NMD) | Up | 8.28 x 10-24 | 31 |
| Metabolism of amino acids | Selenocysteine synthesis | Up | 1.11 x 10-26 | 31 |
| Selenoamino acid metabolism | Up | 1.42 x 10-24 | 32 |
| Response to stimulus | Viral mRNA Translation | Up | 4.59 x 10-27 | 31 |
| Influenza Viral RNA Transcription and Replication | Up | 7.64 x 10-24 | 33 |
| Response of EIF2AK4 (GCN2) to amino acid deficiency | Up | 1.57 x 10-25 | 31 |
| Innate immune system | Neutrophil degranulation | Down | 8.40 x 10-16 | 57 |