

S27 Table: Genes whose expression is altered by SARS-CoV-2-related viruses that significantly interact with the 163 genes selected by TD-based unsupervised FE and enriched by “Drug Matrix” in Enrichr

| Term | Overlap | P-value | Adjusted P-value |
|---|---------|------------------------|------------------------|
| 2-Amino-4-Nitrophenol-625 mg/kg in CMC-Rat-Kidney-1d-up | 26/300 | 2.01×10^{-19} | 1.59×10^{-15} |
| Allyl Alcohol-32 mg/kg in Saline-Rat-Liver-1d-up | 25/291 | 1.30×10^{-18} | 5.12×10^{-15} |
| Meloxicam-33 mg/kg in Corn Oil-Rat-Kidney-5d-up | 23/261 | 1.96×10^{-17} | 5.14×10^{-14} |
| Lipopolysaccharide E. Coli O55:B5-1.25 mg/kg in Saline-Rat-Kidney-1d-up | 24/295 | 2.36×10^{-17} | 4.64×10^{-14} |
| 44'-Methylenedianiline-81 mg/kg in Corn Oil-Rat-Liver-3d-up | 25/333 | 3.27×10^{-17} | 5.16×10^{-14} |
| Gentamicin-40 mg/kg in Saline-Rat-Kidney-14d-up | 24/309 | 6.83×10^{-17} | 8.96×10^{-14} |
| Lead(IV) Acetate-600 mg/kg in Saline-Rat-Kidney-5d-up | 24/309 | 6.83×10^{-17} | 7.68×10^{-14} |
| Dibromochloromethane-325 mg/kg in CMC-Rat-Kidney-3d-up | 24/312 | 8.51×10^{-17} | 8.38×10^{-14} |
| Allopurinol-175 mg/kg in Corn Oil-Rat-Kidney-3d-up | 24/329 | 2.84×10^{-16} | 2.49×10^{-13} |
| Benzyl Acetate-1868 mg/kg in CMC-Rat-Kidney-3d-up | 24/330 | 3.05×10^{-16} | 2.40×10^{-13} |