

S3 Table: Genes whose expression was altered by SARS-CoV-2-related viruses that significantly interact with the 163 genes selected by TD-based unsupervised FE and enriched by “Virus Perturbations from GEO down” in Enrichr

Term	Overlap	P-value	Adjusted P-value
SARS-CoV 0Hour GSE47961	14/300	$1.76 \times 10^{-7}$	$1.42 \times 10^{-5}$
SARS-ddORF6 0Hour GSE47961	10/300	$1.82 \times 10^{-4}$	$4.51 \times 10^{-3}$
SARS-BatSRBD 96Hour GSE47960	9/300	$8.14 \times 10^{-4}$	$1.38 \times 10^{-2}$
SARS-CoV 24Hour GSE17400	9/300	$8.14 \times 10^{-4}$	$1.31 \times 10^{-2}$
cSARS Bat SRBD 60Hour GSE37827	9/300	$8.14 \times 10^{-4}$	$1.25 \times 10^{-2}$
icSARS CoV 48Hour GSE37827	9/300	$8.14 \times 10^{-4}$	$1.19 \times 10^{-2}$
SARS-CoV MA15 Day4-PFU-10 <sup>2</sup> GSE33266	8/300	$3.27 \times 10^{-3}$	$3.11 \times 10^{-2}$