

KEY RESOURCES TABLE

REAGENT or RESOURCE	SOURCE	IDENTIFIER
Deposited data		
mircoarray data of HLH patients and healthy controls	Sumegi et al. 2011	GEO: GSE26050
bulk-RNA seq data of COVID-19 patients and controls	Arunachalam et al. 2020	GEO: GSE152418
bulk-RNA seq data of COVID-19 patients and controls	Liebermann et al. 2020	GEO: GSE152075
bulk-RNA seq data of COVID-19 patients and patients with other respiratory diseases	Mick et al. 2020	GEO: GSE156063
bulk-RNA seq data of COVID-19 patients and controls	Ng et al. 2021	GEO: GSE163151
bulk-RNA seq data of COVID-19 patients and controls	Thair et al. 2021	GEO: GSE152641
bulk-RNA seq data of COVID-19 patients and patients with other respiratory symptoms	Overmyer et al. 2020	GEO: GSE157103
scRNA seq data of COVID-19 patients and controls	Schulte-Schrepping et al. 2020	EGA: EGAS00001004571
bulk-RNA seq data of COVID-19 patients, healthy controls, and patients with Influenza, bacterial pneumonia, and seasonal Coronavirus other than SARS-CoV-2	McClain et al. 2021	GSE161731
bulk-RNA seq data of patients with multisystem inflammatory syndrome in children (MIS-C) and healthy controls	Beckmann et al. 2021	GSE178388
microarray data of patients with Kawasaki disease (KD) and healthy controls	Wright et al. 2018	GSE73461
Software and algorithms		
NetworkAnalyst 3.0	Zhou, G. et al. 2019	https://www.networkanalyst.ca/
Limma voom pipeline	Law, C. W. et al. 2014	https://doi.org/10.1186/gb-2014-15-2-r29
jvenn	Bardou, P. et al. 2014	http://jvenn.toulouse.inra.fr/app/example.html
Circos online tool	Krzywinski, M. et al. 2009	http://mkweb.bcgsc.ca/tableviewer/
Seurat V.4	Hao, Y. et al. 2020	https://doi.org/10.1016/j.cell.2021.04.048 https://satijalab.org/seurat/
NAViGaTOR 3.0.14	Brown, K. R. et al. 2009	doi:10.1093/bioinformatics/btp595
Integrated Interactions Database, IID version 2020-05	Kotlyar M. et al. 2018	http://ophid.utoronto.ca/iid
ClusterProfiler	Yu, G et al. 2012	doi:10.1089/omi.2011.0118.
Enrichr	Chen, E. Y. et al. 2013; Kuleshov, M. V. et al. 2016	https://maayanlab.cloud/Enrichr/
Morpheus	Starruß, J. et al. 2014	https://software.broadinstitute.org/morpheus/
R version 4.0.5	R Core Team (2020)	https://www.r-project.org/

R studio Version 1.4.1106	RStudio Team (2020)	http://www.rstudio.com/ .
circlize R package	Zuguang Gu et al. 2020	https://github.com/jokerengoo/circlize
ggpubr R package	Alboukadel Kassambara, 2020	https://rpkgs.datanovia.com/ggpubr/
lemon R package	Stefan McKinnon Edwards et al. 2020	https://github.com/stefanedwards/lemon
ggplot2 R package	Wickham H, 2016	https://ggplot2.tidyverse.org
factoextra R package for PCA analysis	Alboukadel Kassambara and Fabian Mundt, 2017	https://rpkgs.datanovia.com/factoextra/index.html
Canonical Correlation Analysis (CCA) R package	Jendoubi, T. & Strimmer, K., 2019	https://cran.r-project.org/web/packages/whitening/index.html http://www.strimmerlab.org/software/whitening/
corrgram R package	Kevin Wright, 2021	https://kwstat.github.io/corrgram/
psych R package	William Revelle, 2021	https://personality-project.org/r/psych/
inlmisc R package	Jason C Fisher, 2021	https://github.com/USGS-R/inlmisc
tidyverse R package	Hadley Wickham, 2021	https://github.com/tidyverse/tidyverse/
viridis R package	Simon Garnier et al. 2021	https://sjmgarnier.github.io/viridis/
randomForest (version 4.6.14)	Andy Liaw and Matthew Wiener 2002	https://cran.r-project.org/doc/Rnews/Rnews_2002-3.pdf
Fisher's method	Fisher, R. A., 1932	Fisher, R. A. Statistical Methods for Research Workers 4th edn. (Oliver and Boyd, 1932).
nonparametric MANOVA: nparcomp R package	Konietschke, F. et al., 2015	doi:10.18637/jss.v064.i09
nonparametric Inference for Multivariate Data: npmv R package	Burchett, W. et al., 2017	doi:10.18637/jss.v076.i04