RVD_0h

Joshua Burkhart

5/23/2017

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[1] "SUBJECTID"          "LOGSYMPTSCORE_SC3"
[1] "SUBJECTID"          "LOGSYMPTSCORE_SC3"
[1] "Probe" "Score"
[1] "DEE4X_H1N1"   "X202949_s_at" "X1"
[1] "PROBE"
[1] "X204389_at"          "X0.474852267775333"
[1] "Virus"         "Probe.Set.ID" "weight"
[1] "predictors_logsymptomatic_0h"
[1] "EnsembleID" "Predictor"
[1] "PREDICTOR"
[1] "X" "x"
[1] "Predictors" "Importance"
[1] "x"
[1] "A2M"
[1] "H1N1"          "X207667_s_at"
[1] "X206615_s_at"
[1] "Feature" "Weight"
[1] "X.205827_at."
[1] "X1"       "STUDYID"
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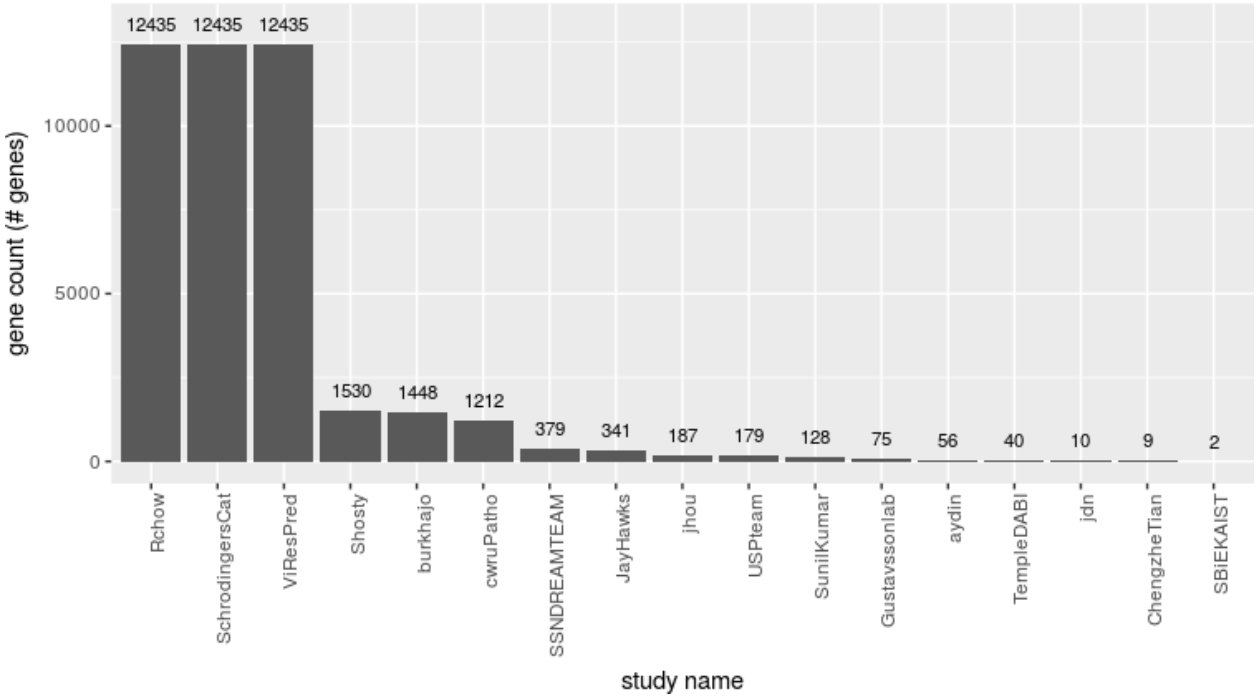


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[1] "length(gene_intersect): 0"
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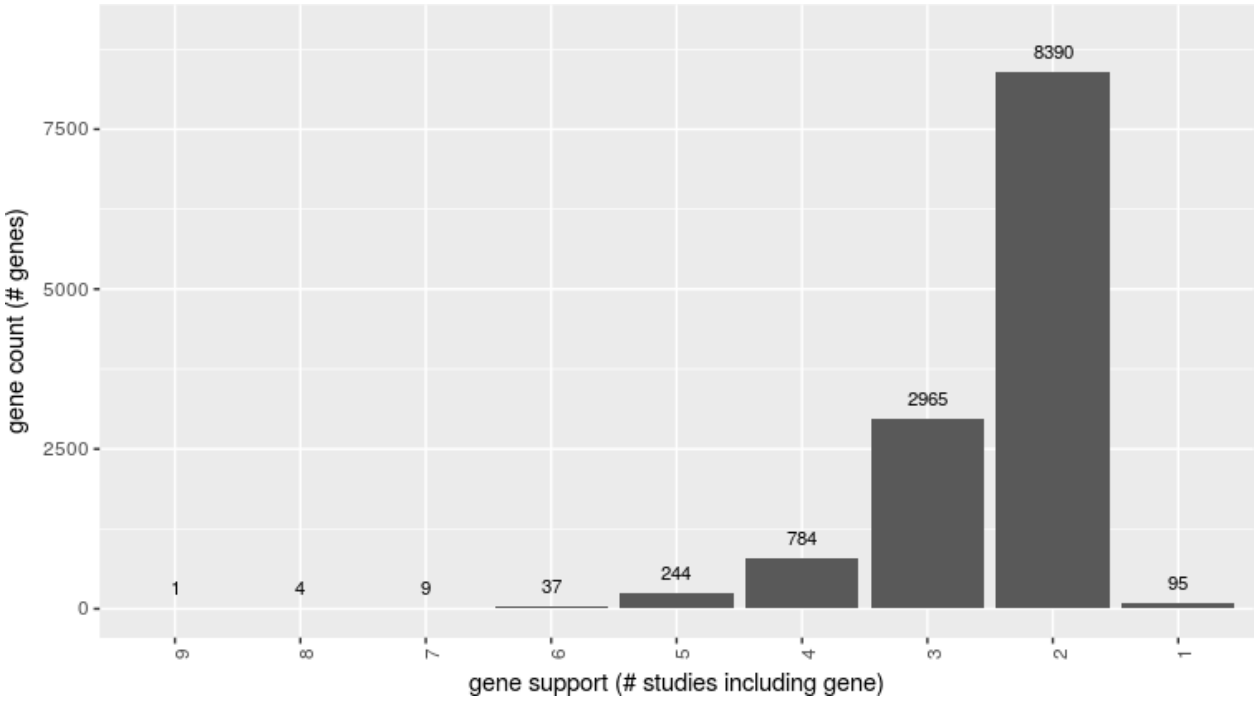


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[1] "HLA-DQA1"
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[1] "CD8B"    "CHI3L1"  "GM2A"    "HLA-DOB"
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[[1]]
[1] "CD8A"   "CDKN1C" "COCH"   "FN1"    "MAOA"   "NLRP2"  "TAL1"   "TCF7L2"
[9] "THBD"
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 [1] "ALAS2"    "AMFR"     "ANK1"     "ANKMY1"   "C1QA"     "CALD1"
 [7] "CCL4"     "CD22"     "CD36"     "CD40"     "CDCA4"    "CHPT1"
[13] "CLCN4"    "CORO2B"   "CXCL5"    "CYP27A1"  "DR1"      "FCGR3B"
[19] "GLIPR1"   "GRHPR"    "HLA-DRB4" "HTRA2"    "IGF1R"    "ITGB3"
[25] "JUP"      "MAPK14"   "MARCH6"   "MKRN1"    "MMP1"     "MVB12B"
[31] "PEX11A"   "PLEK"     "PTPN11"   "SEC14L1"  "SPP1"     "TNS1"
[37] "VPREB3"
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[[1]]
  [1] "ABAT"      "ABCA1"     "ABCB4"     "ABHD5"     "ACOX1"
  [6] "ADAM22"    "ADORA2B"   "AIM2"      "ALPL"      "ANPEP"
 [11] "APOE"      "AQP1"      "AQP9"      "ARG1"      "ARHGAP6"
 [16] "ARHGEF12"  "ARIH2"     "ATP6V1D"   "ATXN1"     "BCL2L1"
 [21] "BLVRA"     "BLVRB"     "BNIP3L"    "BPGM"      "BSG"
 [26] "C1R"       "CA2"       "CASP1"     "CASP5"     "CAT"
 [31] "CCR1"      "CCR2"      "CD200"     "CD24"      "CD28"
 [36] "CD59"      "CD79A"     "CD79B"     "CD86"      "CD99"
 [41] "CDA"       "CDC25B"    "CDH2"      "CEACAM6"   "CEACAM8"
 [46] "CELSR1"    "CFD"       "CLIC3"     "CLU"       "COL4A3"
 [51] "COL5A1"    "CR1"       "CRTAM"     "CST7"      "CTSB"
 [56] "CTSG"      "CTSS"      "CTSW"      "CXCL10"    "CXCL12"
 [61] "CYBRD1"    "CYP1B1"    "CYP3A5"    "DDX3Y"     "DEFA4"
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 [66] "DLG5"      "DNAJB9"    "DOCK4"     "EBP"       "EIF2S1"
 [71] "ELANE"     "ENOSF1"    "ENPP2"     "EPB42"     "ERMAP"
 [76] "ETS2"      "F2RL1"     "FARP1"     "FAS"       "FASLG"
 [81] "FCAR"      "FCER2"     "FCGR1B"    "FCGR2B"    "FPR2"
 [86] "FTH1"      "GATA1"     "GCA"       "GGA2"      "GLRX5"
 [91] "GPM6A"     "GPX3"      "GRAMD1C"   "GYPA"      "GZMA"
 [96] "GZMB"      "GZMH"      "H1F0"      "HAGH"      "HLA-DOA"
[101] "HLA-DPB1"  "HLA-DQB1"  "HLF"       "HMOX1"     "HPGD"
[106] "HRASLS2"   "ICAM4"     "IFI6"      "IFIH1"     "IFIT2"
[111] "IFIT3"     "IGKC"      "IGSF6"     "IKZF1"     "IL12RB2"
[116] "IL15"      "IL18"      "IL18RAP"   "IL1A"      "IL1R1"
[121] "IL1R2"     "IL1RN"     "IL2RA"     "IL4"       "IL4R"
[126] "IL6ST"     "ISG15"     "ITGB4"     "ITGB5"     "JAG1"
[131] "KEL"       "KIR2DL1"   "KIR2DL3"   "KIR3DL1"   "KLF1"
[136] "KLK1"      "KLRB1"     "LAMP3"     "LANCL1"    "LAPTM4B"
[141] "LGALS2"    "LTB"       "LTBP1"     "MAF"       "MAK"
[146] "MAP3K6"    "MAP4K1"    "MAP7"      "MAPKAPK2"  "MARCH1"
[151] "MARCH8"    "MARK3"     "MBP"       "MCTP1"     "MFN2"
[156] "MGST3"     "MME"       "MMP8"      "MMP9"      "MPP1"
[161] "MS4A2"     "MTMR3"     "MXI1"      "MYH14"     "MYO1B"
[166] "NCAM1"     "NEFL"      "NEK2"      "NFE2"      "NID1"
[171] "NLRP3"     "NRG1"      "OAS1"      "OAS2"      "ORM1"
[176] "OSBP2"     "P2RY14"    "PDZK1IP1"  "PF4"       "PF4V1"
[181] "PGLYRP1"   "PI3"       "PLOD2"     "POP1"      "POU2AF1"
[186] "PPBP"      "PRKAR2B"   "PROS1"     "PRSS23"    "QRSL1"
[191] "RAD23A"    "RBX1"      "RIOK3"     "RNF123"    "RPH3A"
[196] "RRAD"      "RRM2"      "RRN3P1"    "RSAD2"     "RXRA"
[201] "S100B"     "SDHD"      "SEMA3C"    "SIAH2"     "SLC11A1"
[206] "SLC14A1"   "SLC22A4"   "SLC25A37"  "SLC6A8"    "SLC7A5"
[211] "SLITRK5"   "SLPI"      "SMAD3"     "SMOX"      "SNCA"
[216] "SOCS2"     "SPARC"     "SYNCRIP"   "SYNJ2"     "TACSTD2"
[221] "TCTN1"     "TGFBR3"    "TGM2"      "THBS1"     "TIMP1"
[226] "TLR1"      "TLR4"      "TMEM176B"  "TNFAIP6"   "TNFRSF10C"
[231] "TNFRSF9"   "TNFSF9"    "TPD52"     "TPST1"     "TRIM58"
[236] "TSPAN5"    "TUBB1"     "TUBB3"     "VASH1"     "VCAN"
[241] "VNN1"      "WNK1"      "YME1L1"    "ZEB1"

[[1]]
  [1] "ABCA6"      "ABCB6"      "ABCD3"      "ABCE1"      "ABHD2"
  [6] "ACAA2"      "ACADL"      "ACADM"      "ACP1"       "ACSL1"
 [11] "ACSL4"      "ACSL5"      "ACSL6"      "ADAM28"     "ADAM9"
 [16] "ADAMDEC1"   "ADAP2"      "ADARB1"     "ADD3-AS1"   "ADIPOR1"
 [21] "ADIPOR2"    "ADK"        "ADM"        "ADORA3"     "AHSP"
 [26] "AK1"        "AKAP12"     "AKR1C2"     "AKR1C3"     "ALDH1A1"
 [31] "ALDH2"      "ALDH5A1"    "ALOX12"     "ALOX15"     "ALOX15B"
 [36] "ANKLE2"     "ANKRD36B"   "ANKRD55"    "ANO1"       "ANP32E"
 [41] "ANXA3"      "ANXA5"      "AP2B1"      "APOBEC3F"   "APP"
 [46] "ARG2"       "ARHGAP12"   "ARL4A"      "ASF1A"      "ASRGL1"
 [51] "ATF3"       "ATP6V0E1"   "ATP6V1G2"   "ATP7A"      "ATRX"
 [56] "AURKA"      "AUTS2"      "AZU1"       "B4GALT1"    "BAG1"
 [61] "BAIAP2"     "BANK1"      "BCL2A1"     "BCL6"       "BFSP1"
 [66] "BIRC2"      "BIRC5"      "BLK"        "BMP6"       "BMX"
 [71] "BRD4"       "BST1"       "BTG2"       "BTNL8"      "C11ORF1"
 [76] "C1D"        "C1ORF54"    "C1QBP"      "C3"         "C5AR1"
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 [91] "CCL20"      "CCNA2"      "CCNE1"      "CCR10"      "CCR3"
 [96] "CCR4"       "CCR5"       "CCR6"       "CCR7"       "CD160"
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[121] "CENPA"      "CENPE"      "CENPF"      "CFH"        "CFP"
[126] "CGGBP1"     "CHST2"      "CHUK"       "CIB1"       "CISH"
[131] "CKS2"       "CLC"        "CLCN3"      "CLEC4A"     "CLEC4E"
[136] "CLEC5A"     "CLIC2"      "CMPK1"      "CNTNAP2"    "COL18A1"
[141] "COL4A1"     "COX6C"      "CPA3"       "CPD"        "CPM"
[146] "CPOX"       "CPVL"       "CR2"        "CREBZF"     "CRELD2"
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[156] "CRYZ"       "CSTA"       "CTLA4"      "CTNNAL1"    "CTSD"
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[171] "DAB2"       "DCK"        "DCTD"       "DCTN3"      "DCUN1D1"
[176] "DCXR"       "DDIT4"      "DDX17"      "DDX39A"     "DEK"
[181] "DEPDC5"     "DLK1"       "DMXL2"      "DNASE1L1"   "DOHH"
[186] "DPEP2"      "DPM2"       "DPP4"       "DPY19L1P1"  "DSC2"
[191] "DSP"        "DTX4"       "DYNC1LI2"   "DYNLT1"     "DYSF"
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[241] "FHIT"       "FKBP1B"     "FKBP5"      "FKBP8"      "FOS"
[246] "FPGT"       "FPR1"       "FSCN1"      "FSTL1"      "FXYD6"
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[256] "GALNT1"     "GAPVD1"     "GAS2L1"     "GATA2"      "GBP2"
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[271] "GP1BA"      "GPM6B"      "GPNMB"      "GPR183"     "GPR37"
[276] "GPR65"      "GPX1"       "GSPT1"      "GSR"        "GSTM3"
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[316] "HSD17B6"    "HSDL2"      "HSPE1"      "HTR2B"      "ICOS"
[321] "IDH2"       "IDH3B"      "IDO1"       "IFI27"      "IFI44"
[326] "IFI44L"     "IFIT1"      "IFITM1"     "IFITM3"     "IFNAR2"
[331] "IFRD1"      "IGF1"       "IGF2R"      "IGFBP4"     "IGFBP7"
[336] "IGHD"       "IGHM"       "IGK"        "IGLC1"      "IGLJ3"
[341] "IL12A"      "IL16"       "IL18R1"     "IL1B"       "IL24"
[346] "IL26"       "IL32"       "IL5RA"      "IL6"        "IL7R"
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[361] "KCNAB2"     "KCNE1"      "KCNJ15"     "KCNJ8"      "KCTD12"
[366] "KHNYN"      "KIAA1324"   "KIF4A"      "KIR2DL4"    "KIR2DS1"
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[376] "KLRC3"      "KLRD1"      "KLRF1"      "KLRG1"      "KRT1"
[381] "KRT23"      "LAMP2"      "LAP3"       "LARP1"      "LAX1"
[386] "LCN2"       "LCP2"       "LDHB"       "LDLRAP1"    "LEF1"
[391] "LGALS3"     "LIF"        "LILRA1"     "LILRA2"     "LILRA3"
[396] "LILRA5"     "LIMCH1"     "LIMK2"      "LIN7B"      "LMF1"
[401] "LPAR1"      "LPAR6"      "LPIN2"      "LRP12"      "LRRN3"
[406] "LTF"        "LY6E"       "LY75"       "MAFF"       "MAN1A1"
[411] "MAP2K7"     "MAP3K14"    "MBNL3"      "MBOAT2"     "MCM5"
[416] "MDK"        "ME1"        "MEF2C"      "MEGF9"      "MERTK"
[421] "MGLL"       "MICAL2"     "MICB"       "MINPP1"     "MKI67"
[426] "MMP14"      "MMP16"      "MN1"        "MOSPD1"     "MPL"
[431] "MPO"        "MPZL1"      "MRC2"       "MRPL49"     "MS4A1"
[436] "MS4A3"      "MS4A4A"     "MTF2"       "MX1"        "MYB"
[441] "MYBL1"      "MYL4"       "MYL9"       "MYLK"       "MYOM2"
[446] "NAB2"       "NAMPT"      "NAP1L1"     "NARF"       "NCF4"
[451] "NCR3"       "NDUFA3"     "NDUFB7"     "NEBL"       "NEDD4L"
[456] "NEK7"       "NELL2"      "NF1"        "NFAT5"      "NINJ1"
[461] "NKG7"       "NKX3-1"     "NME1"       "NOV"        "NOVA1"
[466] "NPIPB15"    "NPLOC4"     "NPM1"       "NQO2"       "NR3C1"
[471] "NR3C2"      "NR4A2"      "NRBF2"      "NRCAM"      "NRGN"
[476] "NRIP1"      "NT5E"       "NUMA1"      "OASL"       "OLFM1"
[481] "OLFM4"      "OPA1"       "OSBPL10"    "OSBPL8"     "OSM"
[486] "OSTM1"      "PA2G4"      "PADI2"      "PADI4"      "PAFAH1B1"
[491] "PALLD"      "PALM"       "PANK3"      "PAPSS2"     "PARVB"
[496] "PASK"       "PAX4"       "PAX5"       "PBX1"       "PCDH9"
[501] "PCNX1"      "PCSK1N"     "PDCD10"     "PDCD1LG2"   "PDE3B"
[506] "PDE6C"      "PDGFA"      "PDGFC"      "PDGFD"      "PDK3"
[511] "PDLIM4"     "PDLIM5"     "PEX6"       "PFKFB3"     "PGD"
[516] "PGRMC1"     "PGS1"       "PHF3"       "PIAS2"      "PICALM"
[521] "PIGK"       "PIGQ"       "PIM1"       "PINK1"      "PIP5K1B"
[526] "PLA2G7"     "PLAUR"      "PLD1"       "PLEK2"      "PLOD1"
[531] "PLSCR1"     "PLXDC1"     "POLD1"      "POLR1D"     "POMZP3"
[536] "PPIF"       "PPIG"       "PPM1A"      "PPM1B"      "PPOX"
[541] "PPP4R1"     "PQLC1"      "PQLC3"      "PRDX2"      "PRDX4"
[546] "PREB"       "PRF1"       "PRG2"       "PRKD3"      "PRMT2"
[551] "PROCR"      "PRPF31"     "PRR5"       "PRRX1"      "PRSS21"
[556] "PSMA3"      "PSME4"      "PSMF1"      "PTAFR"      "PTGDR"
[561] "PTGDR2"     "PTGDS"      "PTGS2"      "PTPRB"      "PTPRN2"
[566] "PTTG1"      "PVALB"      "PXDN"       "PYGM"       "QPCT"
[571] "RAD21"      "RAG1"       "RALBP1"     "RALGDS"     "RANBP10"
[576] "RAP1GAP"    "RAP2A"      "RAPGEF2"    "RASAL2"     "RBM38"
[581] "RBM5"       "REPS2"      "RETN"       "RGS16"      "RHAG"
[586] "RHD"        "RHOBTB1"    "RNASE3"     "RNASE6"     "RNF10"
[591] "RNF11"      "RNF14"      "RNF24"      "RORA"       "RPIA"
[596] "RPL37A"     "RPLP0"      "RPS19"      "RPS28"      "RPS4Y1"
[601] "RSRC1"      "RTP4"       "RXRB"       "RYBP"       "S100A12"
[606] "S100A8"     "S100A9"     "S100P"      "S1PR5"      "SAFB"
[611] "SAMD9"      "SAMHD1"     "SAMM50"     "SBSPON"     "SCG5"
[616] "SCML1"      "SCN3A"      "SCT"        "SDC1"       "SDC2"
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[621] "SDC3"        "SECTM1"     "SELENBP1"   "SERBP1"     "SERPINA7"
[626] "SERPINB2"    "SERPINB9"   "SERPINE2"   "SERPING1"   "SFPQ"
[631] "SI"          "SIGLEC1"    "SIGLEC5"    "SIVA1"      "SLC11A2"
[636] "SLC15A2"     "SLC16A1"    "SLC16A4"    "SLC19A1"    "SLC1A5"
[641] "SLC22A1"     "SLC25A38"   "SLC29A1"    "SLC2A3"     "SLC38A1"
[646] "SLC39A8"     "SLC48A1"    "SLC4A1"     "SLC6A6"     "SLC7A11"
[651] "SLC7A8"      "SLC9A3R1"   "SLCO4C1"    "SMARCA2"    "SMC4"
[656] "SMIM8"       "SMPD3"      "SNED1"      "SNRPA"      "SNRPD1"
[661] "SNRPG"       "SOCS5"      "SORBS1"     "SP2"        "SPC25"
[666] "SPI1"        "SPOCK1"     "SPON1"      "SPTB"       "SRD5A1"
[671] "SRD5A3"      "SRP19"      "SRPX"       "SRSF10"     "SRSF3"
[676] "SRSF7"       "SS18"       "SSPN"       "SSX2IP"     "ST20"
[681] "ST6GALNAC4" "STAM2"      "STEAP3"     "STEAP4"     "STIP1"
[686] "STRN3"       "SUSD4"      "SWAP70"     "TAGLN"      "TAP2"
[691] "TAX1BP1"     "TBC1D22B"   "TBL1XR1"    "TBX21"      "TCF4"
[696] "TCFL5"       "TCL1A"      "TCN1"       "TCN2"       "TESC"
[701] "TFDP2"       "TFDP3"      "TFEC"       "TFPI"       "TFPI2"
[706] "TGFA"        "TIMP3"      "TJP3"       "TKTL1"      "TLE2"
[711] "TLK1"        "TLR2"       "TLR6"       "TMBIM6"     "TMCC2"
[716] "TMEM140"     "TMEM158"    "TMEM176A"   "TMEM45A"    "TMEM97"
[721] "TMOD1"       "TNFRSF11B"  "TNFRSF17"   "TNFRSF1A"   "TNFRSF1B"
[726] "TNFRSF21"    "TNFRSF4"    "TNFSF10"    "TNFSF11"    "TNFSF4"
[731] "TOP1"        "TPD52L1"    "TPM1"       "TPM4"       "TPSAB1"
[736] "TRAF1"       "TRAK2"      "TRAT1"      "TREM1"      "TRIM10"
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[746] "TSPAN13"     "TUBB2A"     "TUBB6"      "TXNIP"      "UBE2D1"
[751] "UBE2E1"      "UBE2H"      "UBE2L3"     "UBXN4"      "UGCG"
[756] "UNC93A"      "UROD"       "UROS"       "USH2A"      "USP1"
[761] "USP18"       "UTS2"       "VEGFA"      "VIPR1"      "VNN2"
[766] "VPREB1"      "WAS"        "WASHC4"     "WDFY3"      "WLS"
[771] "XAF1"        "XBP1"       "XCL1"       "XIST"       "XK"
[776] "YOD1"        "YPEL5"      "ZAP70"      "ZBTB16"     "ZBTB17"
[781] "ZBTB7A"      "ZFP36L1"    "ZFPM2"      "ZNF292"
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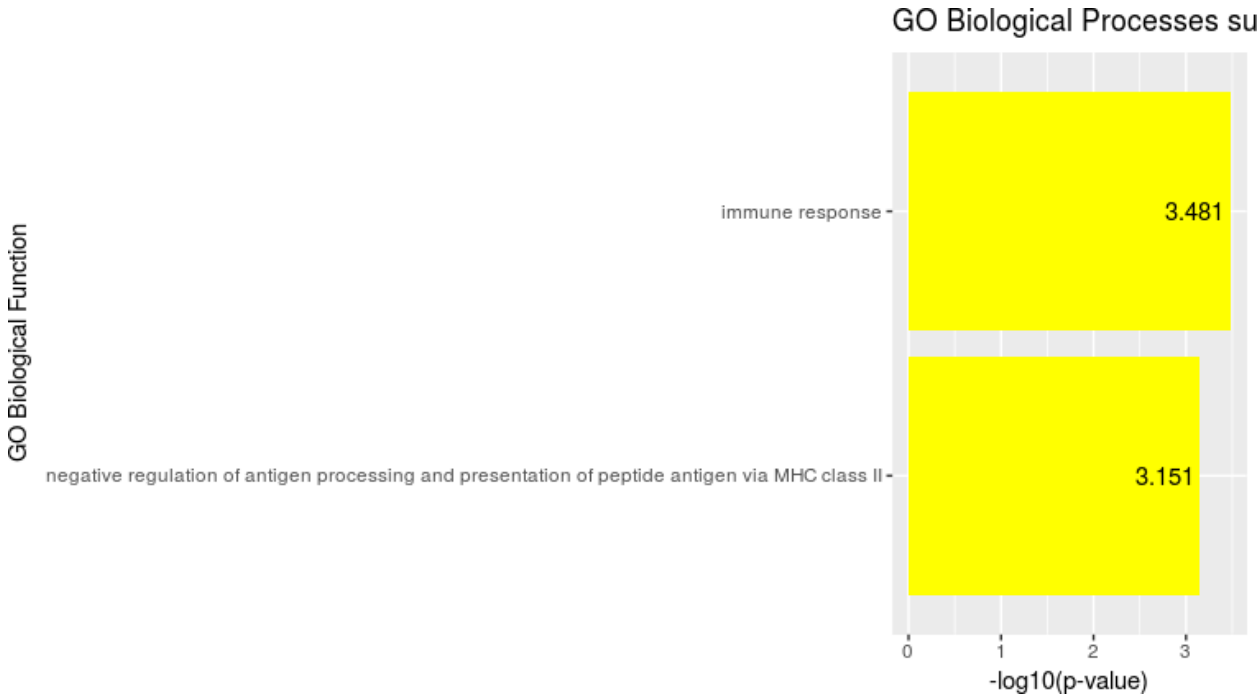
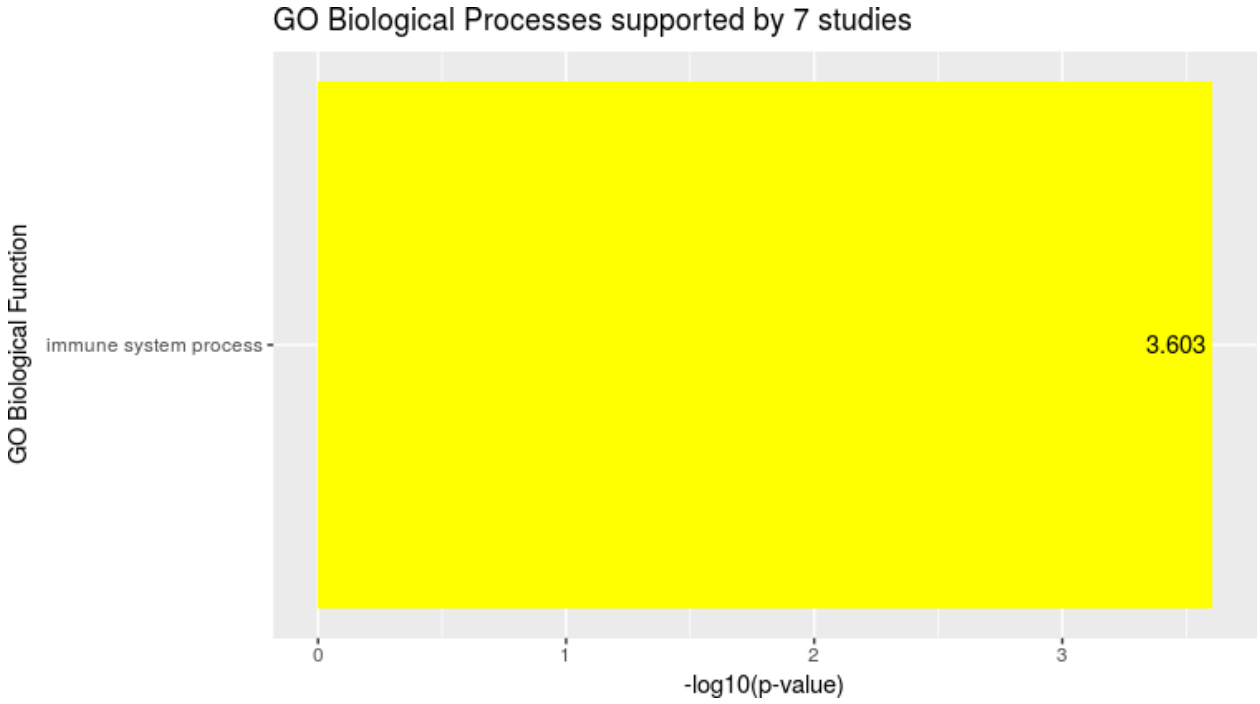
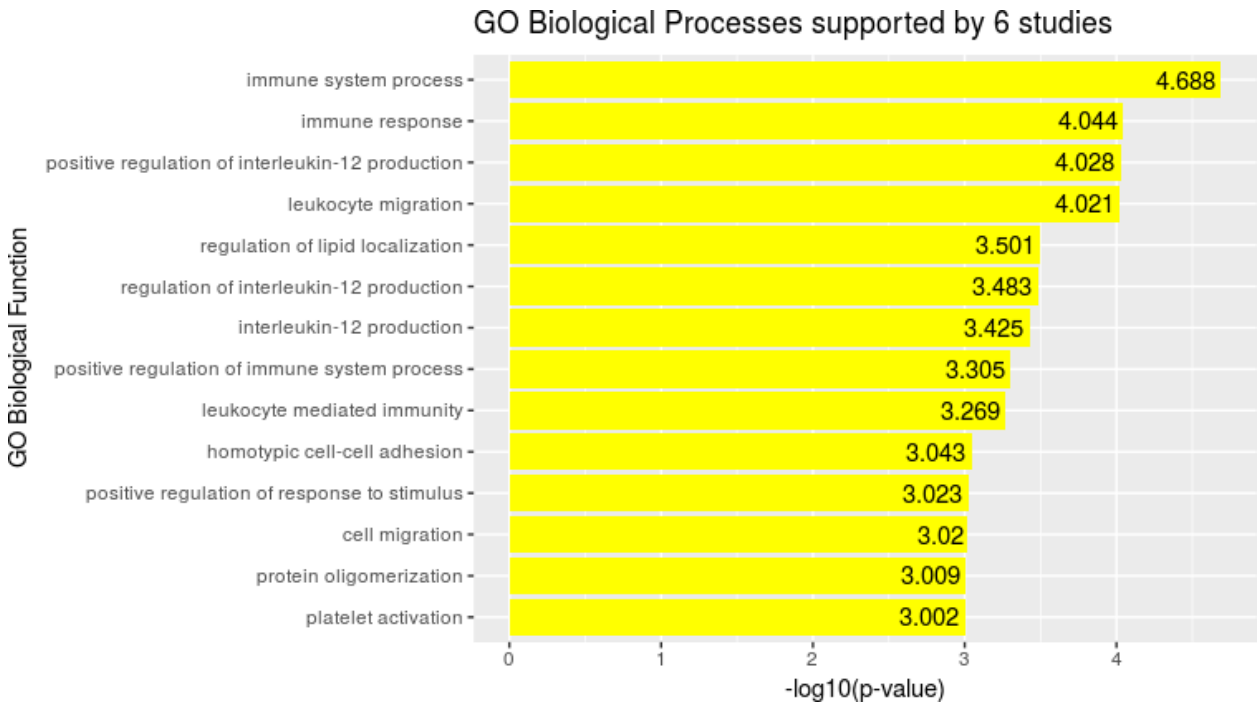
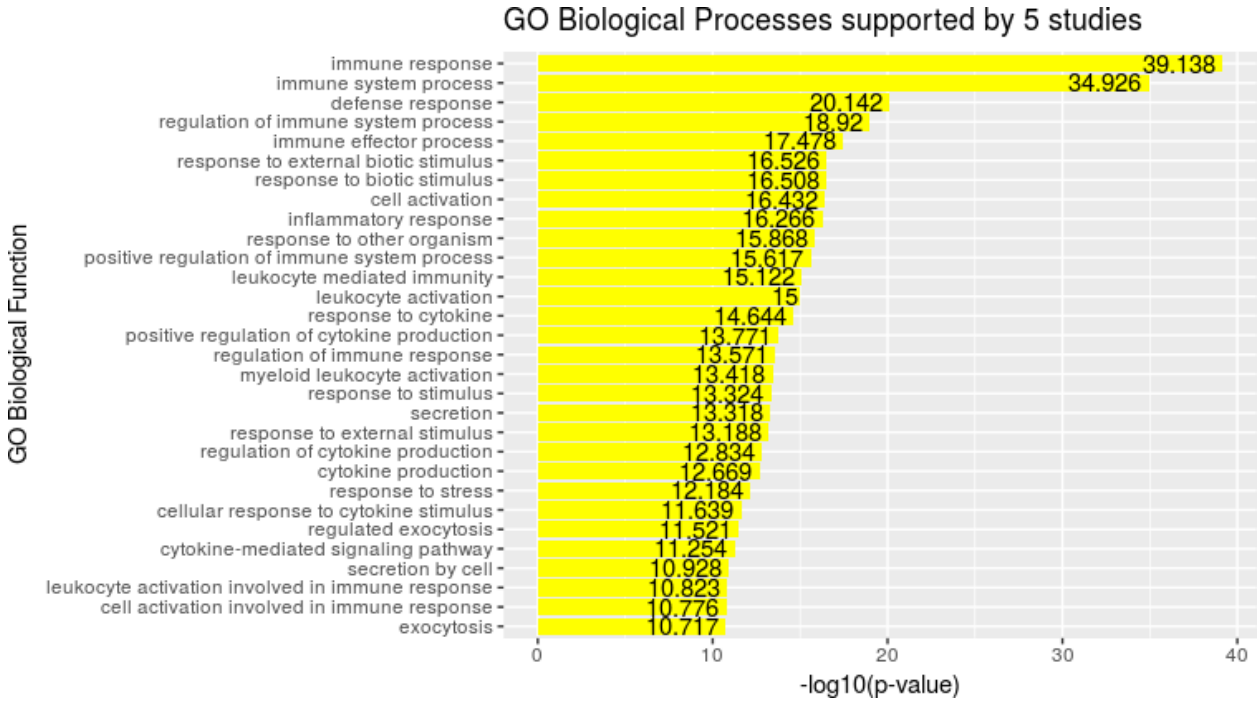
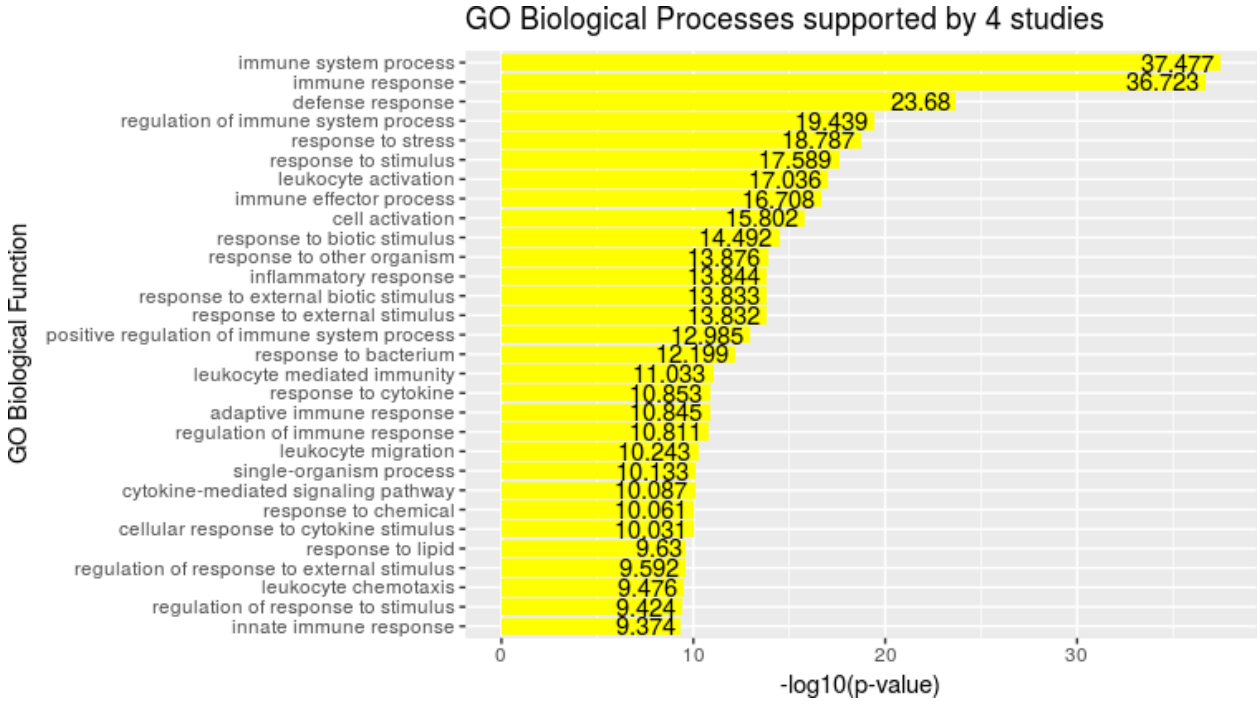
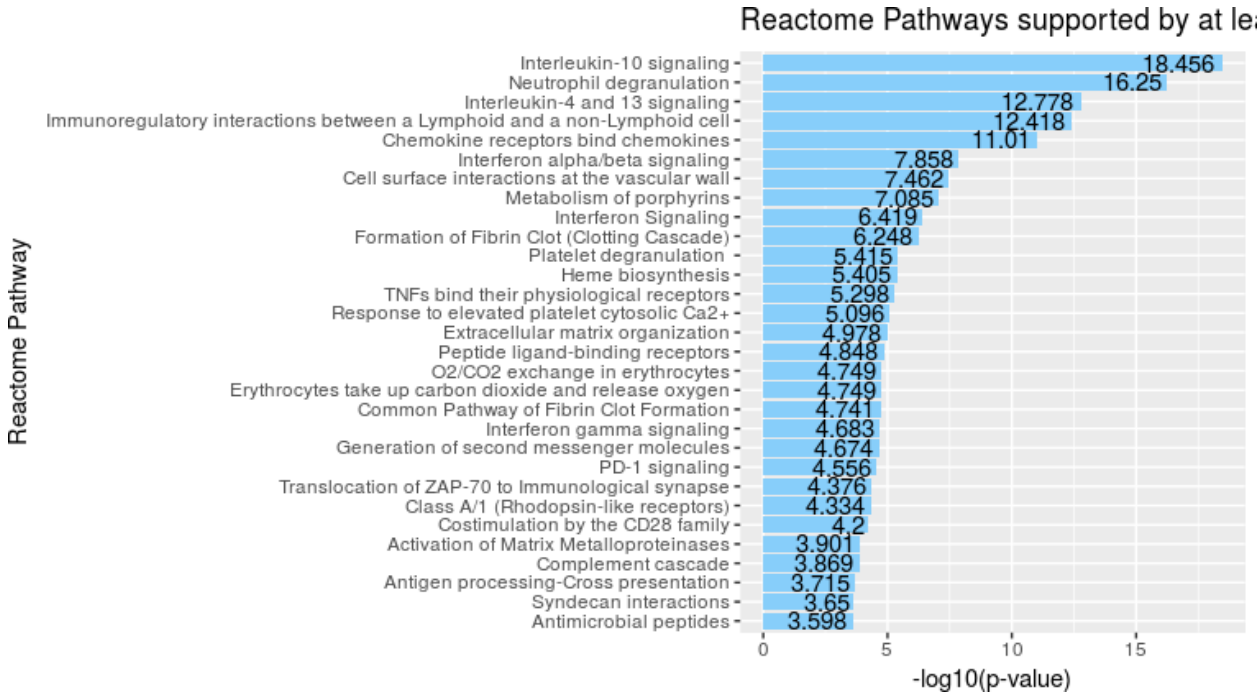

GO Biological Processes su
GO Biological Function
immune response
negative regulation of antigen processing and presentation of peptide antigen via MHC class II
3.481
3.151
0
1
2
3
-log10(p-value)


GO Biological Processes supported by 7 studies
GO Biological Function
immune system process
3.603
0
1
2
3
-log10(p-value)


GO Biological Processes supported by 6 studies
GO Biological Function
immune system process
immune response
positive regulation of interleukin-12 production
leukocyte migration
regulation of lipid localization
regulation of interleukin-12 production
interleukin-12 production
positive regulation of immune system process
leukocyte mediated immunity
homotypic cell-cell adhesion
positive regulation of response to stimulus
cell migration
protein oligomerization
platelet activation
4.688
4.044
4.028
4.021
3.501
3.483
3.425
3.305
3.269
3.043
3.023
3.02
3.009
3.002
0
1
2
3
4
-log10(p-value)


GO Biological Processes supported by 5 studies
GO Biological Function
immune response
immune system process
defense response
regulation of immune system process
immune effector process
response to external biotic stimulus
response to biotic stimulus
cell activation
inflammatory response
response to other organism
positive regulation of immune system process
leukocyte mediated immunity
leukocyte activation
response to cytokine
positive regulation of cytokine production
regulation of immune response
myeloid leukocyte activation
response to stimulus
secretion
response to external stimulus
regulation of cytokine production
cytokine production
response to stress
cellular response to cytokine stimulus
regulated exocytosis
cytokine-mediated signaling pathway
secretion by cell
leukocyte activation involved in immune response
cell activation involved in immune response
exocytosis
39.138
34.926
20.142
18.92
17.478
16.526
16.508
16.432
16.266
15.868
15.617
15.122
15
14.644
13.771
13.571
13.418
13.324
13.318
13.188
12.834
12.669
12.184
11.639
11.521
11.254
10.928
10.823
10.776
10.717
0
10
20
30
40
-log10(p-value)


GO Biological Processes supported by 4 studies
GO Biological Function
immune system process
immune response
defense response
regulation of immune system process
response to stress
response to stimulus
leukocyte activation
immune effector process
cell activation
response to biotic stimulus
response to other organism
inflammatory response
response to external biotic stimulus
response to external stimulus
positive regulation of immune system process
response to bacterium
leukocyte mediated immunity
response to cytokine
adaptive immune response
regulation of immune response
leukocyte migration
single-organism process
cytokine-mediated signaling pathway
response to chemical
cellular response to cytokine stimulus
response to lipid
regulation of response to external stimulus
leukocyte chemotaxis
regulation of response to stimulus
innate immune response
37.477
36.723
23.68
19.439
18.787
17.589
17.036
16.708
15.802
14.492
13.876
13.844
13.833
13.832
12.985
12.199
11.033
10.853
10.845
10.811
10.243
10.133
10.087
10.061
10.031
9.63
9.592
9.476
9.424
9.374
0
10
20
30
-log10(p-value)


Reactome Pathways supported by at le
Reactome Pathway
Interleukin-10 signaling
Neutrophil degranulation
Interleukin-4 and 13 signaling
Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell
Chemokine receptors bind chemokines
Interferon alpha/beta signaling
Cell surface interactions at the vascular wall
Metabolism of porphyrins
Interferon Signaling
Formation of Fibrin Clot (Clotting Cascade)
Platelet degranulation
Heme biosynthesis
TNFs bind their physiological receptors
Response to elevated platelet cytosolic Ca2+
Extracellular matrix organization
Peptide ligand-binding receptors
O2/CO2 exchange in erythrocytes
Erythrocytes take up carbon dioxide and release oxygen
Common Pathway of Fibrin Clot Formation
Interferon gamma signaling
Generation of second messenger molecules
PD-1 signaling
Translocation of ZAP-70 to Immunological synapse
Class A/1 (Rhodopsin-like receptors)
Costimulation by the CD28 family
Activation of Matrix Metalloproteinases
Complement cascade
Antigen processing-Cross presentation
Syndecan interactions
Antimicrobial peptides
18.456
16.25
12.778
12.418
11.01
7.858
7.462
7.085
6.419
6.248
5.415
5.405
5.298
5.096
4.978
4.848
4.749
4.749
4.741
4.683
4.674
4.556
4.376
4.334
4.2
3.901
3.869
3.715
3.65
3.598
0
5
10
15
-log10(p-value)