

BD Rhapsody™ Immune Response Targeted Panel (Human) gene list

Gene	Transcript	Poly(A) position
ADA	NM_000022.3	chr20:44619524
ADGRE1	NM_001974.4	chr19:6940451
ADGRG3	NM_170776.4	chr16:57689375
AIM2	NM_004833.1	chr1:159062486
ALAS2	NM_000032.4	chrX:55009059
ANXA5	NM_001154.3	chr4:121668000
AOC3	NM_003734.3	chr17:42858130
APOBEC3G	NM_021822.3	chr22:39087604
APOE	NM_000041.3	chr19:44909391
AQP9	NM_020980.4	chr15:58185903
ARG1	NM_000045.3	chr6:131584325
ARL4C	NM_005737.3	chr2:234493045
ATF6B	NM_004381.4	chr6:32115537
AURKB	NM_004217.3	chr17:8204740
AZU1	NM_001700.4	chr19:832018
B3GAT1	NM_018644.3	chr11:134378766
BACH2	NM_021813.3	chr6:89926536
BAX	NM_001291428.1	chr19:48961793
BCL11B	NM_022898.2	chr14:99169291
BCL2	NM_000633.2	chr18:63123346
BCL2A1	NM_004049.3	chr15:79960955
BCL6	NM_001706.4	chr3:187721385
BIN2	NM_016293.3	chr12:51281039
BIRC3	NM_001165.4	chr11:102337727
BLK	NM_001715.2	chr8:11564597
BLNK	NM_013314.3	chr10:96191847
BPI	NM_001725.2	chr20:3837503
BTG1	NM_001731.2	chr12:92143364
BTLA	NM_181780.3	chr3:112465936
C10orf54	NM_022153.1	chr10:71750316

Gene	Transcript	Poly(A) position
C1QA	NM_015991.2	chr1:22639605
C1QB	NM_000491.3	chr1:22661529
CASP5	NM_004347.3	chr11:104994245
CBLB	NM_170662.4	chr3:105658273
CCL1	NM_002981.2	chr17:34360383
CCL13	NM_005408.2	chr17:34358608
CCL17	NM_002987.2	chr16:57416061
CCL19	NM_006274.2	chr9:34689573
CCL2	NM_002982.3	chr17:34257197
CCL20	NM_004591.2	chr2:227817564
CCL22	NM_002990.4	chr16:57366187
CCL3	NM_002983.2	chr17:36088259
CCL4	NM_002984.3	chr17:36105612
CCL5	NM_002985.2	chr17:35871497
CCND2	NM_001759.3	chr12:4305162
CCR1	NM_001295.2	chr3:46201949
CCR10	NM_016602.2	chr17:42679408
CCR2	NM_001123041.2	chr3:46360923
CCR3	NM_001837.3	chr3:46266706
CCR4	NM_005508.4	chr3:32954911
CCR5	NM_000579.3	chr3:46376199
CCR7	NM_001838.3	chr17:40553895
CCR8	NM_005201.3	chr3:39333680
CCR9	NM_006641.3	chr3:45902995
CD14	NM_000591.3	chr5:140631733
CD160	NM_007053.3	chr1:145738872
CD163	NM_004244.5	chr12:7471240
CD1A	NM_001763.2	chr1:158258265
CD1B	NM_001764.2	chr1:158328176
CD1C	NM_001765.2	chr1:158293613

Gene	Transcript	Poly(A) position
CD2	NM_001767.3	chr1:116768823
CD2	NM_001767.3	chr1:116769226
CD200	NM_005944.6	chr3:112362808
CD209	NM_021155.3	chr19:7739999
CD22	NM_001771.3	chr19:35347355
CD24	NM_013230.3	chr6:106969831
CD244	NM_016382.3	chr1:160830210
CD247	NM_000734.3	chr1:167430642
CD27	NM_001242.4	chr12:6451710
CD274	NM_014143.3	chr9:5470490
CD28	ENST00000374481.7	chr2:203737830
CD300A	NM_007261.3	chr17:74484788
CD33	NM_001772.3	chr19:51240014
CD34	NM_001773.2	chr1:207886541
CD36	NM_000072.3	chr7:80674159
CD37	NM_001774.2	chr19:49340601
CD38	NM_001775.3	chr4:15853226
CD3D	NM_000732.4	chr11:118339077
CD3E	NM_000733.3	chr11:118316170
CD3G	NM_000073.2	chr11:118353288
CD4	NM_000616.4	chr12:6820809
CD40	NM_001250.5	chr20:46129512
CD44	NM_000610.3	chr11:35232331
CD48	NM_001778.3	chr1:160678749
CD5	NM_014207.3	chr11:61127767
CD52	NM_001803.2	chr1:26320521
CD6	NM_006725.4	chr11:61020373
CD63	NM_001780.5	chr12:55725475
CD69	NM_001781.2	chr12:9752552
CD7	NM_006137.6	chr17:82314874
CD70	NM_001252.4	chr19:6585840
CD72	NM_001782.2	chr9:35609979
CD74	NM_004355.3	chr5:150401643
CD79A	NM_001783.3	chr19:41881370
CD79B	NM_000626.2	chr17:63928742
CD80	NM_005191.3	chr3:119524274
CD86	NM_006889.4	chr3:122119549
CD8A	NM_001768.6	chr2:86784612
CD8B	NM_004931.4	chr2:86841566
CD9	NM_001769.3	chr12:6237982
CEACAM8	NM_001816.3	chr19:42580245
CHI3L1	NM_001276.2	chr1:203179149
CHI3L2	NM_004000.2	chr1:111243435
CLC	NM_001828.5	chr19:39731257
CLEC10A	NM_006344.2	chr17:7074797
CLEC4D	NM_080387.4	chr12:8521377
CLEC4E	NM_014358.3	chr12:8534485
CMKLR1	NM_004072.2	chr12:108288049
CMTM2	NM_144673.2	chr16:66588181
CNOT2	NM_014515.5	chr12:70354991
CNTNAP3	NM_033655.3	chr9:39072767
CPA3	NM_001870.3	chr3:148897089
CR2	NM_001877.4	chr1:207489884
CSF2	NM_000758.3	chr5:132076165
CSF3	NM_000759.3	chr17:40017811
CST7	NM_003650.3	chr20:24959919
CTLA4	NM_005214.4	chr2:203873963
CTSD	NM_001909.4	chr11:1752815
CTSG	NM_001911.2	chr14:24573557

Gene	Transcript	Poly(A) position
CTSW	NM_001335.3	chr11:65883737
CX3CR1	NM_001337.3	chr3:39263497
CXCL1	NM_001511.3	chr4:73871101
CXCL10	NM_001565.3	chr4:76021121
CXCL11	NM_005409.4	chr4:76033799
CXCL13	NM_006419.2	chr4:77611831
CXCL16	NM_022059.3	chr17:4733541
CXCL2	NM_002089.3	chr4:74097185
CXCL3	NM_002090.2	chr4:74036589
CXCL5	NM_002994.4	chr4:73995872
CXCL8	NM_000584.3	chr4:73743713
CXCL9	NM_002416.2	chr4:76001472
CXCR1	NM_000634.2	chr2:218163327
CXCR2	NM_001557.3	chr2:218137068
CXCR3	NM_001504.1	chrX:71615921
CXCR4	NM_003467.2	chr2:136114351
CXCR5	NM_001716.4	chr11:118896261
CXCR6	NM_006564.1	chr3:45948347
DEFA3	NM_005217.3	chr8:7015871
DEFA4	NM_001925.2	chr8:6935826
DOCK8	NM_203447.3	chr9:465251
DPP4	NM_001935.3	chr2:161992364
DUSP1	NM_004417.3	chr5:172768379
DUSP2	NM_004418.3	chr2:96143178
DUSP4	NM_001394.6	chr8:29333066
EBF1	NM_024007.4	chr5:158695922
EGR1	NM_001964.2	chr5:138469025
EGR3	NM_004430.2	chr8:22687661
ELANE	NM_001972.3	chr19:856242
ENTPD1	NM_001776.5	chr10:95867909
EOMES	NM_005442.3	chr3:27715956
EPX	NM_000502.5	chr17:58205174
F13A1	NM_000129.3	chr6:6144078
F5	NM_000130.4	chr1:169514171
FAM129C	NM_173544.4	chr19:17553638
FAM65B	NM_014722.3	chr6:24804286
FAS	NM_000043.5	chr10:89015783
FASLG	NM_000639.2	chr1:172666868
FCER1A	NM_002001.3	chr1:159308224
FCER1G	NM_004106.1	chr1:161219243
FCER2	NM_002002.4	chr19:7688778
FCGR3A	NM_000569.6	chr1:161542009
FCN1	NM_002003.3	chr9:134909592
FLT3	NM_004119.2	chr13:28003618
FN1	NM_002026.3	chr2:215360865
FOSB	NM_006732.2	chr19:45475177
FOSL1	NM_005438.4	chr11:65892223
FOXO1	NM_002015.3	chr13:40555770
FOXP1	NM_032682.5	chr3:70956127
FOXP3	NM_014009.3	chrX:49250440
FTH1	NM_002032.2	chr11:61964285
FUT4	NM_002033.3	chr11:94549890
FYB	NM_001465.4	chr5:39105321
FYN	NM_002037.5	chr6:111661342
GAB2	NM_012296.3	chr11:78215514
GAPDH	NM_002046.5	chr12:6538369
GIMAP2	NM_015660.2	chr7:150693637
GIMAP5	NM_018384.4	chr7:150743580
GNAI2	NM_002070.3	chr3:50259346

Gene	Transcript	Poly(A) position
GNLY	NM_006433.4	chr2:85698743
GZMA	NM_006144.3	chr5:55110248
GZMB	NM_004131.4	chr14:24630959
GZMH	NM_033423.4	chr14:24606489
GZMK	NM_002104.2	chr5:55034131
HAVCR2	NM_032782.4	chr5:157086100
HLA-A	NM_002116.7	chr6:29945764
HLA-DMA	NM_006120.3	chr6:32948619
HLA-DPA1	NM_033554.3	chr6:33065163
HLA-DQB1	NM_002123.4	chr6:32659937
HLA-DRA	NM_019111.4	chr6:32444940
HMMR	NM_012484.2	chr5:163491938
ICAM1	NM_000201.2	chr19:10286614
ICOS	NM_012092.3	chr2:203961572
IER3	NM_003897.3	chr6:30743201
IFITM2	NM_006435.2	chr11:309395
IFITM3	NM_021034.2	chr11:319677
IFNA1	NM_024013.2	chr9:21441316
IFNG	NM_000619.2	chr12:68154770
IFNGR1	NM_000416.2	chr6:137197486
IGBP1	NM_001551.2	chrX:70166140
IGHA1_secreted	ENST00000633714.1	K1270846.1:174887
IGHD_membrane	ENST00000390556.6	chr14:105836767
IGHE_secreted	ENST00000390541.2	chr14:105599944
IGHG1_membrane	ENST00000390548.6	chr14:105736343
IGHG1_secreted	ENST00000390542.6	chr14:105741340
IGHG2_secreted	ENST00000390545.2	chr14:105643070
IGHG3_secreted	ENST00000390551.6	chr14:105769104
IGHG4_secreted	ENST00000390543.3	chr14:105624344
IGHM_membrane	ENST00000637539.1	chr14:105851709
IGHM_secreted	ENST00000390559.6	chr14:105854224
IGKC	ENST00000390237.2	chr2:88857168
IGLC3	ENST00000390325.2	chr22:22906803
IKZF1	NM_006060.5	chr7:50404179
IKZF2	NM_016260.2	chr2:212999804
IL12A	NM_000882.3	chr3:159996019
IL12RB1	NM_005535.2	chr19:18059073
IL12RB2	NM_001559.2	chr1:67396900
IL13	NM_002188.2	chr5:132661111
IL15	ENST00000477265.5	chr4:141733457
IL15RA	NM_002189.3	chr10:5952389
IL17A	NM_002190.2	chr6:52190638
IL17F	NM_052872.3	chr6:52236686
IL18	NM_001562.3	chr11:112143262
IL18R1	NM_003855.3	chr2:102398774
IL18RAP	NM_003853.3	chr2:102452560
IL1B	NM_000576.2	chr2:112829760
IL1R2	NM_004633.3	chr2:102028413
IL1RL1	NM_003856.3	chr2:102344719
IL1RN	NM_000577.4	chr2:113134014
IL2	NM_000586.3	chr4:122451470
IL21	NM_021803.3	chr4:122612628
IL22	NM_020525.4	chr12:68248245
IL23R	NM_144701.2	chr1:67259979
IL25	NM_022789.3	chr14:23376403
IL2RA	NM_000417.2	chr10:6010694
IL2RB	NM_000878.3	chr22:37125929
IL3	NM_000588.3	chr5:132063203
IL31	NM_001014336.1	chr12:122172030

Gene	Transcript	Poly(A) position
IL32	NM_004221.4	chr16:3069528
IL33	NM_033439.3	chr9:6257856
IL3RA	NM_002183.3	chrX:1382689
IL4	NM_000589.3	chr5:132682678
IL4R	NM_000418.3	chr16:27364776
IL5	NM_000879.2	chr5:132541445
IL6	NM_000600.4	chr7:22731997
IL7R	NM_002185.3	chr5:35879599
IL9	NM_000590.1	chr5:135892246
IRF4	NM_002460.3	chr6:411439
IRF8	NM_002163.2	chr16:85922602
ITGA4	NM_000885.5	chr2:181537748
ITGAE	NM_002208.4	chr17:3714684
ITGAM	NM_000632.3	chr16:31332867
ITGAX	NM_000887.4	chr16:31382866
ITGB2	NM_000211.4	chr21:44886059
JCHAIN	NM_144646.3	chr4:70655541
JUN	NM_002228.3	chr1:58780888
JUNB	NM_002229.2	chr19:12793237
KCNE3	NM_005472.4	chr11:74455113
KDELRL1	NM_006801.2	chr19:48382579
KIAA0101	NM_014736.5	chr15:64366011
KIR2DL1	NM_014218.2	chr19:54784326
KIT	NM_000222.2	chr4:54740712
KLRB1	NM_002258.2	chr12:9595274
KLRC1	NM_002259.4	chr12:10446028
KLRC3	NM_002261.2	chr12:10412316
KLRC4	NM_013431.2	chr12:10407384
KLRF1	NM_016523.2	chr12:9844752
KLRG1	NM_005810.3	chr12:9010748
KLRK1	NM_007360.3	chr12:10372355
LAG3	NM_002286.5	chr12:6778452
LAIR2	NM_002288.5	chr19:54510684
LAMP1	NM_005561.3	chr13:113323243
LAMP3	NM_014398.3	chr3:183122217
LAP3	NM_015907.2	chr4:17607967
LAT	NM_014387.3	chr16:28990782
LAT2	NM_014146.3	chr7:74229827
LCK	NM_005356.4	chr1:32286163
LEF1	NM_016269.4	chr4:108047550
LGALS1	NM_002305.3	chr22:37679799
LGALS3	NM_002306.3	chr14:55145306
LGALS9	NM_002308.3	chr17:27649553
LIF	NM_002309.4	chr22:30240453
LILRB4	NM_001278426.3	chr19:54668223
LIPA	NM_000235.3	chr10:89213576
LRRC32	NM_005512.2	chr11:76657526
LTA	NM_000595.3	chr6:31574320
LTB	NM_002341.1	chr6:31580639
LY86	NM_004271.3	chr6:6654980
LYN	NM_002350.3	chr8:56011334
MCM2	NM_004526.3	chr3:127622431
MCM4	NM_005914.3	chr8:47976921
MGST1	NM_020300.4	chr12:16364233
MITF	NM_000248.3	chr3:69968162
MKI67	NM_002417.4	chr10:128098610
MME	NM_000902.3	chr3:155183729
MMP12	NM_002426.5	chr11:102862925
MMP9	NM_004994.2	chr20:46016552

Gene	Transcript	Poly(A) position
MS4A1	NM_021950.3	chr11:60470055
MYC	NM_002467.4	chr8:127741273
MZB1	NM_016459.3	chr5:139387570
NAMPT	NM_005746.2	chr7:106250045
NCAM1	NM_000615.6	chr11:113278422
NCR3	NM_147130.2	chr6:31588904
NINJ2	NM_016533.5	chr12:564298
NKG7	NM_005601.3	chr19:51371623
NRP1	NM_003873.5	chr10:33177756
NT5E	NM_002526.3	chr6:85495791
PASK	NM_015148.3	chr2:241106298
PAX5	NM_016734.2	chr9:36833277
PCNA	NM_002592.2	chr20:5115093
PDCD1	NM_005018.2	chr2:241849887
PDIA4	NM_004911.4	chr7:149003615
PDIA6	NM_005742.3	chr2:10783683
PI3	NM_002638.3	chr20:45176542
PIK3AP1	NM_152309.2	chr10:96593432
PIK3IP1	NM_052880.4	chr22:31281684
PMCH	NM_002674.3	chr12:102196459
POU2AF1	NM_006235.2	chr11:111352260
PRDM1	NM_001198.3	chr6:106107903
PRDM1	NM_001198.3	chr6:106109933
PRF1	NM_005041.4	chr10:70597350
PSEN1	NM_000021.3	chr14:73223689
PTGDR2	NM_004778.2	chr11:60850935
PTPRC	NM_002838.4	chr1:198756421
PTTG2	NM_006607.2	chr4:37961010
QPCT	NM_012413.3	chr2:37373320
RGS1	NM_002922.3	chr1:192579765
RNASE2	NM_002934.2	chr14:20956435
RNASE6	NM_005615.4	chr14:20782459
RORA	NM_002943.3	chr15:60488351
RORC	NM_005060.3	chr1:151806109
RPN2	NM_002951.4	chr20:37241432
RUNX3	NM_004350.2	chr1:24899758
S100A10	NM_002966.2	chr1:151983017
S100A12	NM_005621.1	chr1:153373716
S100A9	NM_002965.3	chr1:153361020
SELL	NM_000655.4	chr1:169690670
SELPLG	NM_003006.4	chr12:108622282
SLC25A37	NM_016612.3	chr8:23572278
SLC7A7	NR_040448.1	chr14:22773437
SNCA	NM_000345.3	chr4:89726344
SPP1	NM_000582.2	chr4:87983244
STAT1	NM_007315.3	chr2:190969036
STAT3	NM_003150.3	chr17:42313463
STAT4	NM_003151.3	chr2:191029580
STAT5A	NM_003152.3	chr17:42311938
STAT6	NM_003153.4	chr12:57095986
TARP_refseq	NM_001003799.1	chr7:38259643
TBX21	NM_013351.1	chr17:47746119

Gene	Transcript	Poly(A) position
TCF4	NM_003199.2	chr18:55223457
TCF7	NM_003202.3	chr5:134148043
TCL1A	NM_021966.2	chr14:95710059
TGFB1	NM_000660.5	chr19:41330531
TGFB3	NM_003239.3	chr14:75958157
TGFBI	NM_000358.2	chr5:136063533
THBD	NM_000361.2	chr20:23045635
THBS1	NM_003246.3	chr15:39597464
TIAF1	NM_004740.3	chr17:29073522
TIGIT	ENST00000481065.5	chr3:114308282
TLR2	NM_003264.4	chr4:153705403
TLR7	NM_016562.3	chrX:12890096
TLR8	NM_016610.3	chrX:12923165
TLR9	NM_017442.3	chr3:52221083
TMEM97	NM_014573.2	chr17:28328223
TNF	NM_000594.3	chr6:31578328
TNFRSF13C	NM_052945.3	chr22:41925015
TNFRSF17	NM_001192.2	chr16:11968067
TNFRSF25	NM_003790.2	chr1:6461161
TNFRSF4	NM_003327.3	chr1:1211348
TNFRSF8	NM_001243.4	chr1:12144202
TNFRSF9	ENST00000377507.7	chr1:7919847
TNFSF10	NM_003810.3	chr3:172505681
TNFSF13	NM_003808.3	chr17:7561600
TNFSF13B	NM_006573.4	chr13:108308346
TNFSF14	NM_003807.4	chr19:6663138
TNFSF8	NM_001244.3	chr9:114901951
TOP2A	NM_001067.3	chr17:40388528
TPSAB1	NM_003294.3	chr16:1242553
TRAC	ENST00000611116.1	chr14:22552152
TRAT1	NM_016388.3	chr3:108854867
TRBC2	ENST00000466254.1	chr7:142802743
TRDC	ENST00000390477.2	chr14:22465788
TREM1	NM_018643.4	chr6:41276003
TRIB2	NM_021643.3	chr2:12742729
TSPAN32	NM_139022.2	chr11:2318139
TXK	NM_003328.2	chr4:48066514
TYMS	NM_001071.2	chr18:673197
UBE2C	NM_007019.3	chr20:45816953
VEGFA	NM_003376.5	chr6:43786255
VMO1	NM_182566.2	chr17:4785287
VNN2	NM_004665.4	chr6:132744043
VPREB3	NM_013378.2	chr22:23752747
VPS28	NM_016208.3	chr8:144423623
VSIG4	NM_007268.2	chrX:66021741
XBP1	NM_005080.3	chr22:28794834
YBX3	NM_003651.4	chr12:10699316
ZAP70	NM_001079.3	chr2:97739859
ZBED2	NM_024508.4	chr3:111592902
ZBTB16	NM_006006.4	chr11:114250673
ZNF683	NM_173574.3	chr1:26361636

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