

Gene List  
HTG EdgeSeq  
Precision Immuno-Oncology Panel



For Research Use Only. Not for use in diagnostic procedures.

|                 |             |         |        |         |             |         |                |              |           |             |         |
|-----------------|-------------|---------|--------|---------|-------------|---------|----------------|--------------|-----------|-------------|---------|
| A2M             | ATG16L1     | CARD11  | CD1B   | CDCA2   | COCH        | DAPK2   | EPST11         | FOXM1        | HGF       | IFI6        | IL1R2   |
| AADAT           | ATG5        | CASP1   | CD1C   | CDCA3   | COL1A1      | DAPL1   | ERBB2          | FOXO1        | HHLA2     | IFIH1       | IL1TRAP |
| ABCB1           | ATG7        | CASP10  | CD1D   | CDCA5   | COL1A2      | DBF4    | ERBB3          | FOXP1        | HIF1A     | IFIT1       | IL1RL1  |
| ABCB11          | ATM         | CASP3   | CD1E   | CDCA8   | COL3A1      | DCLRE1A | ERCC6L         | FOXP3        | HIST1H2BH | IFIT2       | IL1RL2  |
| ABCC2           | ATOH1       | CASP4   | CD2    | CDH1    | CORO1A      | DCN     | ESCO2          | FOXRED2      | HJURP     | IFIT3       | IL1RN   |
| ABCC6           | ATP5F1      | CASP5   | CD200  | CDH15   | CPA3        | DDIAS   | ESPL1          | FPR1         | HK1       | IFIT5       | IL2     |
| ABCF1           | ATXN1       | CASP8   | CD209  | CDH5    | CPE         | DDX5    | ESYT2          | FPR2         | HK2       | IFITM1      | IL20    |
| ABCG2           | AUNIP       | CAV1    | CD22   | CDK1    | CR1         | DDX58   | ETS1           | FRYL         | HLA-A     | IFITM2      | IL20RA  |
| ABHD1           | AURKA       | CBLB    | CD226  | CDK4    | CR2         | DEFB1   | ETS2           | FUT4         | HLA-B     | IFITM3      | IL20RB  |
| ABL1            | AURKB       | CCDC138 | CD24   | CDK6    | CREB1       | DEPDC1  | ETV1           | FUT5         | HLA-C     | IFNA_family | IL21    |
| ABL2            | AXIN1       | CCL1    | CD244  | CDKN1A  | CREB5       | DGAT2   | ETV4           | FXYD5        | HLA-DMA   | IFNAR1      | IL21R   |
| ACKR3           | AXIN2       | CCL11   | CD247  | CDKN1B  | CREBBP      | DGKA    | EWSR1          | FYB1         | HLA-DMB   | IFNAR2      | IL22    |
| ACP6            | AXL         | CCL13   | CD27   | CDKN2A  | CRISPLD1    | DHX40   | EXO1           | FYN          | HLA-DOA   | IFNB1       | IL22RA1 |
| ACTG2           | B3GAT1      | CCL14   | CD274  | CDKN3   | CRMP1       | DIAPH3  | EYS            | FZD3         | HLA-DOB   | IFNG        | IL22RA2 |
| ACTR3B          | BAGE        | CCL15   | CD276  | CDN1    | CRP         | DLAT    | EZH2           | G6PD         | HLA-DPA1  | IFNGR1      | IL23A   |
| ADA             | BAGE_family | CCL16   | CD28   | CEACAM1 | CRTAM       | DLD     | F13A1          | GABRA5       | HLA-DPB1  | IFNL1       | IL23R   |
| ADAM17          | BAGE2_BAGE3 | CCL17   | CD33   | CEACAM5 | CSF1        | DLGAP5  | F2RL1          | GAD1         | HLA-DQA1  | IFNL2       | IL24    |
| ADCY1           | BAGE4_BAGE5 | CCL18   | CD34   | CEACAM6 | CSF1R       | DLX6    | FABP4          | GADD45GIP1   | HLA-DQA2  | IFNL3       | IL25    |
| ADD2            | BATF        | CCL19   | CD37   | CEACAM8 | CSF2        | DMBT1   | FADD           | GAGE_family  | HLA-DQB1  | IFNL4       | IL26    |
| ADGRE5          | BATF2       | CCL2    | CD38   | CEBPB   | CSF2RA      | DNAH14  | FAM111B        | GATA2        | HLA-DQB2  | IFNLR1      | IL27    |
| ADORA2A         | BAX         | CCL20   | CD3D   | CENPA   | CSF2RB      | DNMT1   | FAM122B        | GATA3        | HLA-DRA   | IGF1R       | IL2RA   |
| ADORA2B         | BCL10       | CCL21   | CD3E   | CENPE   | CSF3        | DOCK9   | FAM161A        | GBP1         | HLA-DRB1  | IGF2R       | IL2RB   |
| ADRB2           | BCL2        | CCL22   | CD3G   | CENPF   | CSF3R       | DONSON  | FAM222A        | GBP5         | HLA-E     | IGFBP3      | IL2RG   |
| AGER            | BCL2L1      | CCL23   | CD4    | CENPH   | CSK         | DPP4    | FAM69B         | GCK_liver_T2 | HLA-F     | IGSF6       | IL3     |
| AHR             | BCL2L11     | CCL24   | CD40   | CENPI   | CT45_family | DPYSL4  | FAM72_family   | GCK_pan_T2   | HLA-G     | IHH         | IL31    |
| AICDA           | BCL6        | CCL25   | CD40LG | CENPL   | CT47_family | DSC3    | FAM83B         | GCK          | HLF       | IKKBK       | IL32    |
| AIF1            | BEX1        | CCL26   | CD44   | CENPU   | CTAG1A_1B   | DSE     | FANCA          | GDF15        | HMBS      | IKBKG       | IL33    |
| AKT1            | BEX2        | CCL27   | CD47   | CENPW   | CTAG2       | DSG3    | FANCD2         | GGT7         | HMGB1     | IKZF1       | IL34    |
| AKT3            | BID         | CCL28   | CD48   | CEP250  | CTBP1       | DST     | FANCI          | GINS4        | HMGCS2    | IKZF2       | IL3RA   |
| ALCAM           | BIRC5       | CCL3    | CD5    | CEP55   | CTLA4       | DTL     | FAP            | GLB1L2       | HMMR      | IKZF3       | IL4     |
| ALOX15B         | BLK         | CCL4    | CD52   | CES1    | CTNNB1      | DUSP4   | FAS            | GLIPR1       | HMOX1     | IKZF4       | IL4R    |
| ALOX5           | BLNK        | CCL5    | CD53   | CGREF1  | CTNRC       | DUSP6   | FASLG          | GNLV         | HMX2      | IL10        | IL5     |
| ANAPC1          | BMI1        | CCL7    | CD55   | CHDH    | CTSG        | E2F2    | FBLN1          | GPI          | HNF1A     | IL10RA      | IL5RA   |
| ANKRD30A        | BMP6        | CCL8    | CD58   | CHGA    | CTSH        | E2F7    | FCAR           | GPR18        | HNF1B     | IL10RB      | IL6     |
| ANLN            | BMP7        | CCNA2   | CD59   | CHIT1   | CTSL        | EBF4    | FCER1G         | GPR19        | HORMAD1   | IL11        | IL6R    |
| ANP32B          | BNC1        | CCNB1   | CD5L   | CHMP4B  | CTSS        | EBI3    | FCER2          | GPRINT       | HORMAD2   | IL11RA      | IL6ST   |
| ANPEP           | BORA        | CCNB2   | CD6    | CHRM2   | CX3CL1      | ECT2    | FCGRI1_FCGRI1B | GRAP2        | HPDL      | IL12A       | IL7     |
| ANXA1           | BRCA1       | CCND1   | CD63   | CHRM3   | CX3CR1      | EEF1G   | FCGR2A_2C      | GSDME        | HPN       | IL12B       | IL7R    |
| APAF1           | BRCA2       | CCND3   | CD68   | CHST10  | CXCL1       | EEF2    | FCGR2B         | GTF3C1       | HRAS      | IL12RB1     | IL9     |
| APC2            | BRIP1       | CCNE1   | CD69   | CHUK    | CXCL10      | EFNA4   | FCGR3A_3B      | GTSE1        | HSD11B1   | IL12RB2     | IL9R    |
| APOE            | BRMS1L      | CCNE2   | CD7    | CIITA   | CXCL11      | EFNB3   | FCMR           | GUSB         | HSP90B1   | IL13        | IMPG2   |
| APP             | BST2        | CCNF    | CD70   | CIP2A   | CXCL12      | EGFR    | FCRL2          | GZMA         | HSPA1A    | IL13RA1     | INSM1   |
| ARG1            | BTK         | CCR1    | CD72   | CKAP2   | CXCL13      | EGR1    | FCRLA          | GZMB         | IBSP      | IL13RA2     | IQGAP3  |
| ARG2            | BTLA        | CCR10   | CD74   | CKAP2L  | CXCL14      | EGR2    | FEN1           | GZMH         | ICAM1     | IL15        | IRAK1   |
| ARHGAP11A       | BUB1        | CCR2    | CD79A  | CKLF    | CXCL16      | EGR3    | FEZ1           | GZMK         | ICAM2     | IL15RA      | IRAK2   |
| ARHGAP11B       | BUB1B       | CCR3    | CD79B  | CLCA2   | CXCL2       | EHD2    | FGD6           | GZMM         | ICAM3     | IL16        | IRAK3   |
| ARHGDIB         | C11orf71    | CCR4    | CD80   | CLDN3   | CXCL3       | EIF2A   | FGFR3          | H2AFZ        | ICAM4     | IL17A       | IRAK4   |
| ARHGEF26        | C17orf80    | CCR5    | CD83   | CLEC12A | CXCL5       | EIF2AK2 | FICD           | HASPIN       | ICOS      | IL17B       | IRF1    |
| ARMCX6          | C19orf66    | CCR6    | CD84   | CLEC2B  | CXCL6       | ELK1    | FLI1           | HAVCR2       | ICOSLG    | IL17C       | IRF2    |
| AS3MT           | C1orf56     | CCR7    | CD86   | CLEC4A  | CXCL8       | ELL3    | FLT1           | HCAR1        | ID2       | IL17D       | IRF3    |
| ASCL1           | C1QA        | CCR8    | CD8A   | CLEC4C  | CXCL9       | EME1    | FLT3           | HCAR2        | ID3       | IL17F       | IRF4    |
| ASF1A           | C1QB        | CCR9    | CD8B   | CLEC5A  | CXCR1       | EMP1    | FLT3LG         | HDC          | ID4       | IL17RA      | IRF5    |
| ASF1B           | C20orf24    | CCR2L2  | CD96   | CLEC6A  | CXCR2       | EMX2    | FLVCR1         | HELLS        | IDH1      | IL17RB      | IRF7    |
| ASPM            | C3          | CCT5    | CD99   | CLEC7A  | CXCR3       | ENG     | FMO5           | HERC6        | IDH2      | IL18        | IRF8    |
| ASRGL1          | C3AR1       | CD14    | CDC20  | CLEC9A  | CXCR4       | ENO1    | FN1            | HES1         | IDO1      | IL18BP      | IRF9    |
| ATF1            | C4A_C4B     | CD160   | CDC25A | CLSPN   | CXCR5       | ENTPD1  | FOLH1          | HES5         | IDO2      | IL18R1      | IRGM    |
| ATF2            | C5          | CD163   | CDC25C | CMA1    | CXCR6       | EOMES   | FOS            | HEXIM2       | IFI16     | IL19        | IRST    |
| ATF3_activating | CA4         | CD180   | CDC45  | CMKLR1  | CYBB        | CYBB    | EP300          | FOXA1        | HEY1      | IFI27       | ISG15   |
| ATF3_repressing | CALML3      | CD19    | CDC6   | CNNM1   | CYLD        | CYLD    | EPCAM          | FOXG1        | HEY2      | IFI35       | ISG20   |
| ATG12           | CAMP        | CD1A    | CDC7   | CNTLN   | CYP27A1     | CYP27A1 | EPHX3          | FOXJ1        | HEYL      | IFI44L      | ITGAI   |

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Continued

|              |         |           |         |             |         |          |             |          |           |           |           |
|--------------|---------|-----------|---------|-------------|---------|----------|-------------|----------|-----------|-----------|-----------|
| ITGA2        | KLRD1   | LY96      | MOB3A   | NKX2-1      | PDLIM3  | PSMB8    | RPSA        | SMPDL3B  | TAL1      | TNFRSF11A | UBA6      |
| ITGA3        | KLRF1   | LYN       | MPO     | NLRC5       | PDP1    | PSMB9    | RRAD        | SNAI1    | TAP1      | TNFRSF11B | UBE2C     |
| ITGA4        | KLRG1   | LYVE1     | MPPED1  | NLRP3       | PECAM1  | PSMD7    | RRAS2       | SNAI2    | TAP2      | TNFRSF12A | UBE2T     |
| ITGA5        | KLRK1   | LYZ       | MR1     | NMRAL1      | PF4     | PSRC1    | RRM1        | SOC51    | TAPBP     | TNFRSF13B | UBE3A     |
| ITGA6        | KNL1    | M6PR      | MRAP2   | NOD1        | PFKFB3  | PTEN     | RRM2        | SOC53    | TARP      | TNFRSF13C | UHRF1     |
| ITGAE        | KPNA2   | MAB21L2   | MRC1    | NOD2        | PFKFB4  | PTGDR2   | RTN1        | SOC55    | TBK1      | TNFRSF14  | ULBP1     |
| ITGAL        | KREMEN1 | MAD2L1    | MS4A1   | NOS2        | PGF     | PTGER1   | RUNX1       | SOD1     | TBX21     | TNFRSF17  | UNC5D     |
| ITGAM        | KRT13   | MADCAM1   | MS4A2   | NOS3        | PHF10   | PTGER2   | RUNX3       | SOX2     | TCF12     | TNFRSF18  | UPK2      |
| ITGAX        | KRT16   | MAF       | MS4A4A  | NOTCH1      | PIF1    | PTGER3   | S100A12     | SOX9     | TCF19     | TNFRSF19  | UPK3A     |
| ITGB1        | KRT17   | MAGEA1    | MSH2    | NOTCH3      | PIK3CA  | PTGER4   | S100A8      | SP100    | TCF7      | TNFRSF1A  | USP9Y     |
| ITGB2        | KRT18   | MAGEA10   | MSH3    | NOX1        | PIK3CD  | PTGS1    | S100A9      | SP110    | TCL1A     | TNFRSF1B  | VAV1      |
| ITGB3        | KRT19   | MAGEA12   | MSH4    | NPM1        | PIK3CG  | PTGS2    | S100B       | SPANXACD | TCL1B     | TNFRSF21  | VCAM1     |
| ITGB4        | KRT34   | MAGEA3_A6 | MSH5    | NPR3        | PIMREG  | PTK7     | SALL2       | SPANXB1  | TDO2      | TNFRSF25  | VEGFA     |
| ITGB7        | KRT5    | MAGEA4    | MSH6    | NRL         | PKLR    | PTPN11   | SAMD12      | SPANXN1  | TEDC2     | TNFRSF4   | VEGFC     |
| ITK          | KRT6A   | MAGEB2    | MSR1    | NRP1        | PKM     | PTPN6    | SAMD9       | SPANXN3  | TEK       | TNFRSF8   | VESIR     |
| ITLN2        | KRT7    | MAGEC1    | MST1R   | NT5E        | PKMYT1  | PTPN7    | SAMHD1      | SPANXN4  | TESC      | TNFRSF9   | VSNL1     |
| ITPKC        | KRT8    | MAGEC2    | MT2A    | NTN3        | PKP1    | PTPRC    | SCAMP5      | SPANXN5  | TEX14     | TNFSF10   | VTCN1     |
| JAK1         | KRTCAP3 | MAP2K1    | MTDH    | NTRK2       | PLA2G6  | PTPRCAP  | SCG3        | SPC24    | TFF1      | TNFSF11   | VWDE      |
| JAK2         | KSR2    | MAP2K2    | MTFR2   | NUDT1       | PLA2G7  | PVR      | SDHA        | SPC25    | TFRC      | TNFSF12   | VWF       |
| JAK3         | L1CAM   | MAP2K4    | MTOR    | NUF2        | PLAU    | PVT1     | SELE        | SPDL1    | TGFB1     | TNFSF13   | WARS      |
| JAKMIP3      | LAG3    | MAP2K6    | MUC1    | NUP107      | PLAUR   | PXYLP1   | SELL        | SPI1     | TGFB2     | TNFSF13B  | WASHC4    |
| JAML         | LAIR2   | MAP2K7    | MX1     | NUSAP1      | PLEKHG4 | PYCARD   | SELPLG      | SPIB     | TGFB1     | TNFSF14   | WDHD1     |
| JCHAIN       | LAMC3   | MAP3K1    | MXD3    | OAS1        | PLEKHG6 | PYCR1    | SEMA4D      | SPIN4    | TGFB1     | TNFSF15   | WDR60     |
| KCNA1        | LAMP1   | MAP3K5    | MYBL2   | OAS2        | PLK1    | PYGL     | SERINC2     | SPINK1   | TGFB2     | TNFSF18   | WDR76     |
| KCNH2        | LAMP3   | MAP3K7    | MYC     | OAS3        | PLK4    | RAC1     | SERPINA1    | SPINK5   | TGIF2     | TNFSF4    | WNK2      |
| KCNK5        | LAPTM5  | MAP4      | MYD88   | OAZ1        | PMCH    | RACGAP1  | SERPINB2    | SPN      | THAP11    | TNFSF8    | WNT5A     |
| KDM5B        | LAT     | MAP4K1    | MYH10   | OCLN        | PMEL    | RAD51    | SERPINB5    | SPOP     | THBD      | TNFSF9    | WNT7B     |
| KDR          | LCK     | MAPK1     | MYH11   | OIP5        | PML     | RAD51AP1 | SERPINB7    | SPP1     | THBS1     | TOLLIP    | XAF1      |
| KHDRBS2      | LCN2    | MAPK11    | MYH9    | OLR1        | PNOC    | RAD54L   | SERPINE1    | SPTLC3   | THY1      | TOP2A     | XAGE1B_1E |
| KHK          | LCP1    | MAPK14    | MYO1B   | OPTN        | POC1A   | RAG1     | SGO1        | SRGN     | TICAM1    | TP53      | XAGE2     |
| KIF14        | LEXM    | MAPK3     | MYO5C   | ORC1        | PODXL2  | RB1      | SGO2        | SSX1     | TICAM2    | TP63      | XAGE3     |
| KIF15        | LGALS1  | MAPK8     | MYOCD   | ORC6        | POLQ    | RBM24    | SH2D1A      | SSX2     | TIGIT     | TPSAB1    | XAGE5     |
| KIF18B       | LGALS3  | MAPKAPK2  | MYOF    | OSM         | POLR2A  | RBX1     | SH2D1B      | ST6GAL1  | TIMP1     | TPX2      | XCL1      |
| KIF20A       | LGALS9  | MARCO     | NCAM1   | PAGE1       | POUZAF1 | RDM1     | SHCBP1      | STAT1    | TIRAP     | TRABD2A   | XCL1_XCL2 |
| KIF23        | LGSN    | MBL2      | NCAPG   | PAGE2_PAGE5 | POUZ2F  | REL      | SIGIRR      | STAT2    | TK1       | TRAF2     | XCR1      |
| KIF2C        | LIF     | MCM10     | NCAPG2  | PAGE3       | POU5F1  | RELA     | SIGLEC5     | STAT3    | TLDC1     | TRAF3     | YWHAZ     |
| KIF4A        | LILRA4  | MCM2      | NCAPH   | PAGE4       | PPARD   | RELB     | SIT1        | STAT4    | TLR1      | TRAF6     | ZAP70     |
| KIF5C        | LILRB1  | MCM6      | NCF1    | PAGE5       | PPARG   | REPS1    | SKA1        | STAT5A   | TLR10     | TRAP1     | ZBTB46    |
| KIFC1        | LILRB2  | MCM7      | NCK1    | PATZ1       | PPBP    | REV3L    | SKA3        | STAT5B   | TLR2      | TRAT1     | ZEB1      |
| KIR2DL1      | LIMA1   | MECOM     | NCL     | PAX5        | PPIA    | RFC4     | SKAP2       | STAT6    | TLR3      | TREM1     | ZIC5      |
| KIR2DL1_2DL2 | LIPE    | MEF2C     | NCR1    | PBK         | PPM1E   | RGS20    | SKP2        | STIL     | TLR4      | TREM2     | ZNF14     |
| KIR2DL3      | LMNA    | MELK      | NCR3    | PBX1        | PRAME   | RHOG     | SLAMF1      | STK32A   | TLR5      | TRIM21    | ZNF205    |
| KIR2DL4      | LMNB1   | MERTK     | NCR3LG1 | PCLAF       | PRC1    | RIC8A    | SLAMF6      | STOX2    | TLR6      | TRIM22    | ZNF74     |
| KIR2DL5A_5B  | LOXL1   | MGA       | NDC1    | PCNA        | PRDM1   | RIPK2    | SLAMF7      | SUSD3    | TLR7      | TRIM29    | ZWILCH    |
| KIR2DS2_2DS4 | LOXL2   | MICA      | NDC80   | PDCD1       | PRDM6   | RMI2     | SLAMF8      | SUZ12    | TLR8      | TRIM59    | ZYX       |
| KIR2DS4      | LRBA    | MICB      | NECTIN2 | PDCD1LG2    | PRF1    | RNASEH2A | SLC11A1     | SV2A     | TLR9      | TRIP13    |           |
| KIR2DSx      | LRG1    | MIF       | NEFL    | PDGFC       | PRG2    | RND2     | SLC25A3     | SVIL     | TMBIM1    | TROAP     |           |
| KIR3DL1      | LRP1    | MKI67     | NEIL3   | PDGFRB      | PRKCD   | RNF149   | SLC25A5-AS1 | SYCP1    | TMEM173   | TSG101    |           |
| KIR3DL2      | LST1    | MLANA     | NEK2    | PDHA1       | PRKCE   | RNF4     | SLC27A2     | SYK      | TMEM246   | TTK       |           |
| KIR3DL3      | LTA     | MLF1      | NFATC1  | PDHA2       | PRR11   | RNFT2    | SLC2A1      | SYT17    | TMPO      | TUBB      |           |
| KIR3DS1      | LTB     | MME       | NFATC3  | PDHB        | PRR15L  | ROR2     | SLC31A2     | SYT4     | TNF       | TWIST1    |           |
| KIR-panL     | LTB4R   | MMP11     | NFATC4  | PDHX        | PSEN1   | RORC     | SLC35B1     | TAB1     | TNFAIP3   | TWIST2    |           |
| KIR-panS     | LTBP1   | MMP12     | NFKB1   | PKD1        | PSEN2   | RORL     | SLFN11      | TACC3    | TNFAIP8   | TXLNA     |           |
| KIT          | LTBR    | MMP2      | NFKB2   | PKD2        | PSMB10  | RPL6     | SMAD2       | TACSTD2  | TNFRSF10A | TXNIP     |           |
| KLF2         | LTK     | MMP9      | NFKBIA  | PKD3        | PSMB5   | RPS19    | SMAD3       | TAGAP    | TNFRSF10B | TYK2      |           |
| KLHDC9       | LY86    | MND1      | NGFR    | PKD4        | PSMB6   | RPS6     | SMAD7       | TAGLN    | TNFRSF10C | TYMS      |           |
| KLRB1        | LY9     | MNDA      | NKG7    | PDLIM1      | PSMB7   | RPS7     | SMPD3       | TAGLN3   | TNFRSF10D | TYROBP    |           |