**Table E1:** Gene-Panel

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ADA | CECR1 | IKZF1 | NBN | RASGRP1 | TGFB2 |
| AICDA | CLEC16A | IL10RA | NCF2 | REL | TGFB3 |
| AIRE | CORO1B | IL10RB | NFKB1 | RELA | TMEM17 |
| AKT1 | CR2 | IL12RB2 | NFKB2 | RELB | TNFAIP1 |
| AKT3 | CRACR2A | IL17A | NFKBIA | RIF1 | TNFRSF10A |
| APCS | CTLA4 | IL17RA | NLRP12 | RLTPR | TNFRSF13B |
| ARPC1B | CXCL12 | IL21 | NOD2 | RORA | TNFRSF13C |
| BACH2 | CXCR4 | IL21R | NOTCH1 | RPS6KB2 | TNFRSF17 |
| BBX | CXCR5 | IL4I1 | NOTCH2 | RPTOR | TNFRSF18 |
| BCL2L1 | DCLRE1C | IL6ST | ORAI1 | RTEL1 | TNFRSF4 |
| BCL6 | DKC1 | IRF2BP2 | ORAI2 | RTP4 | TNFSF10 |
| BLNK | DOCK11 | IRF4 | ORAI3 | SARAF | TNFSF13 |
| BTK | DOCK8 | IRF8 | P2RX7 | SEC61A1 | TNFSF13B |
| CARD11 | DUSP2 | ITSN2 | PDCD1 | SEC61A2 | TYK2 |
| CARD9 | FCGR3A | KCNC4 | PDCD1LG2 | SEC61G | USP8 |
| CASP8 | FCGRT | KIDINS220 | PGM3 | SH2D1A | VAV1 |
| CCL5 | FCHO1 | LRBA | PIK3AP1 | SH3KBP1 | VAV2 |
| CCR6 | FOXP3 | LRRC32 | PIK3C2A | SOCS1 | WAS |
| CD19 | GATA2 | LRRK2 | PIK3CD | SPINK5 | WDR1 |
| CD27 | GRAP | LTF | PIK3R1 | STAT1 | WNT5A |
| CD274 | GRB2 | MCM10 | PIK3R4 | STAT3 | XCL1 3 |
| CD28 | HDAC4 | MCM4 | PRDM1 | STAT4 | XIAP |
| CD40 | HSPA5 | MICALL2 | PRKCD | STAT5B | ZNF341 |
| CD40LG | ICOS | MLH1 | PRKD1 | STIM1 |  |
| CD79A | ICOSLG | MS4A1 | PTEN | STIM2 |  |
| CD79B | IGHM | MSH2 | PTPN1 | STK11 |  |
| CD80 | IGLL1 | MSH5 | PTPN6 | STXBP2 |  |
| CD81 | IKBKB | MTA3 | RAD50 | TCF3 |  |
| CD86 | IKBKE | MYH9 | RAG1 | TFRC |  |
| CDX1 | IKBKG | MYO5B | RAG2 | TGFB1 |  |