

| type                                  | gene   |
|---------------------------------------|--------|
| Contraction of vascular smooth muscle | ACTA1  |
| Contraction of vascular smooth muscle | ACTA2  |
| Contraction of vascular smooth muscle | ACTB   |
| Contraction of vascular smooth muscle | ACTBL2 |
| Contraction of vascular smooth muscle | ACTC1  |
| Contraction of vascular smooth muscle | ACTG1  |
| Contraction of vascular smooth muscle | ACTG2  |
| Contraction of vascular smooth muscle | MYH1   |
| Contraction of vascular smooth muscle | MYH10  |
| Contraction of vascular smooth muscle | MYH11  |
| Contraction of vascular smooth muscle | MYH13  |
| Contraction of vascular smooth muscle | MYH14  |
| Contraction of vascular smooth muscle | MYH15  |
| Contraction of vascular smooth muscle | MYH16  |
| Contraction of vascular smooth muscle | MYH2   |
| Contraction of vascular smooth muscle | MYH3   |
| Contraction of vascular smooth muscle | MYH4   |
| Contraction of vascular smooth muscle | MYH6   |
| Contraction of vascular smooth muscle | MYH7   |
| Contraction of vascular smooth muscle | MYH7B  |
| Contraction of vascular smooth muscle | MYH8   |
| Contraction of vascular smooth muscle | MYH9   |
| Contraction of vascular smooth muscle | MYO1A  |
| Contraction of vascular smooth muscle | MYO1B  |
| Contraction of vascular smooth muscle | MYO1C  |
| Contraction of vascular smooth muscle | MYO1D  |
| Contraction of vascular smooth muscle | MYO1E  |
| Contraction of vascular smooth muscle | MYO1F  |
| Contraction of vascular smooth muscle | MYO1G  |
| Contraction of vascular smooth muscle | MYO1H  |
| Contraction of vascular smooth muscle | MYO3A  |
| Contraction of vascular smooth muscle | MYO3B  |
| Contraction of vascular smooth muscle | MYO9A  |
| Contraction of vascular smooth muscle | MYO9B  |
| Contraction of vascular smooth muscle | MYO5A  |
| Contraction of vascular smooth muscle | MYO5B  |
| Contraction of vascular smooth muscle | MYO5C  |
| Contraction of vascular smooth muscle | MYO6   |
| Contraction of vascular smooth muscle | MYO7A  |
| Contraction of vascular smooth muscle | MYO7B  |
| Contraction of vascular smooth muscle | MYO10  |
| Contraction of vascular smooth muscle | MYO19  |
| Contraction of vascular smooth muscle | MYO15A |
| Contraction of vascular smooth muscle | MYO15B |
| Contraction of vascular smooth muscle | MYO16  |
| Contraction of vascular smooth muscle | MYO18A |
| Contraction of vascular smooth muscle | MYO18B |
| Contraction of vascular smooth muscle | TNNC1  |
| Contraction of vascular smooth muscle | TNNC2  |
| Contraction of vascular smooth muscle | TNNI1  |
| Contraction of vascular smooth muscle | TNNI2  |
| Contraction of vascular smooth muscle | TNNI3  |
| Contraction of vascular smooth muscle | TNNT1  |
| Contraction of vascular smooth muscle | TNNT2  |
| Contraction of vascular smooth muscle | TNNT3  |
| Contraction of vascular smooth muscle | TPM1   |
| Contraction of vascular smooth muscle | TPM2   |

Contraction of vascular smooth muscle TPM3  
Contraction of vascular smooth muscle TPM4

| type               | gene     |
|--------------------|----------|
| Collagen Synthesis | COL1A1   |
| Collagen Synthesis | COL1A2   |
| Collagen Synthesis | COL2A1   |
| Collagen Synthesis | COL3A1   |
| Collagen Synthesis | COL4A    |
| Collagen Synthesis | COL4A2   |
| Collagen Synthesis | COL4A3   |
| Collagen Synthesis | COL4A4   |
| Collagen Synthesis | COL4A5   |
| Collagen Synthesis | COL4A6   |
| Collagen Synthesis | COL5A1   |
| Collagen Synthesis | COL5A2   |
| Collagen Synthesis | COL5A3   |
| Collagen Synthesis | COL6A1   |
| Collagen Synthesis | COL6A2   |
| Collagen Synthesis | COL6A3   |
| Collagen Synthesis | COL6A4P1 |
| Collagen Synthesis | COL6A4P2 |
| Collagen Synthesis | COL6A5   |
| Collagen Synthesis | COL6A6   |
| Collagen Synthesis | COL7A1   |
| Collagen Synthesis | COL8A1   |
| Collagen Synthesis | COL8A2   |
| Collagen Synthesis | COL9A1   |
| Collagen Synthesis | COL9A2   |
| Collagen Synthesis | COL9A3   |
| Collagen Synthesis | COL10A1  |
| Collagen Synthesis | COL11A1  |
| Collagen Synthesis | COL11A2  |
| Collagen Synthesis | COL12A1  |
| Collagen Synthesis | COL13A1  |
| Collagen Synthesis | COL14A1  |
| Collagen Synthesis | COL15A1  |
| Collagen Synthesis | COL16A1  |
| Collagen Synthesis | COL17A1  |
| Collagen Synthesis | COL18A1  |
| Collagen Synthesis | COL19A1  |
| Collagen Synthesis | COL20A1  |
| Collagen Synthesis | COL21A1  |
| Collagen Synthesis | COL22A1  |
| Collagen Synthesis | COL23A1  |
| Collagen Synthesis | COL24A1  |
| Collagen Synthesis | COL25A1  |
| Collagen Synthesis | COL26A1  |
| Collagen Synthesis | COL27A1  |
| Collagen Synthesis | COL28A1  |

| type | gene     |
|------|----------|
| G0   | RPL32    |
| G0   | RPS18    |
| G0   | HSP90AB1 |
| G0   | RPS4X    |
| G0   | HSP90AA1 |
| G0   | RPS2     |
| G0   | RPS19    |
| G0   | RPL28    |
| G0   | RPL3     |
| G0   | RPL22    |
| G0   | RPL14    |
| G0   | RPS17    |
| G0   | RPS5     |
| G0   | RPS8     |
| G0   | RPL12    |
| G0   | PTMA     |
| G0   | RPL35    |
| G1   | GSTM1    |
| G1   | RPL32    |
| G1   | PLAC8    |
| G1   | RPS18    |
| G1   | RPS4X    |
| G1   | MS4A3    |
| G1   | CTSG     |
| G1   | RPS2     |
| G1   | MPO      |
| G1   | PRTN3    |
| G1   | ELANE    |
| G1   | CALR     |
| G1   | RPS19    |
| G1   | NKG7     |
| G1   | RPL3     |
| G1   | RPL14    |
| G1   | RPS17    |
| G1   | RPS8     |
| G1   | RPL12    |
| G1   | PTMA     |
| G1   | RPL35    |
| G2   | STMN1    |
| G2   | RRM2     |
| G2   | TUBA4A   |
| G2   | CAMP     |
| G2   | SMC4     |
| G2   | HMGB2    |
| G2   | SERPINB1 |
| G2   | DEK      |
| G2   | PPIA     |
| G2   | ANP32B   |
| G2   | SMC2     |
| G2   | FCN1     |
| G2   | MKI67    |
| G2   | TUBA1B   |
| G2   | HMGB1    |
| G2   | CEBPE    |
| G2   | NUSAP1   |
| G2   | TOP2A    |
| G2   | BIRC5    |
| G2   | UBE2C    |

|     |            |
|-----|------------|
| G2  | TUBB       |
| G2  | PTMA       |
| G3  | CAPG       |
| G3  | ST3GAL5    |
| G3  | LTF        |
| G3  | CAMP       |
| G3  | ANXA3      |
| G3  | MGST2      |
| G3  | SERPINB1   |
| G3  | SYNE1      |
| G3  | CYBB       |
| G3  | CPNE3      |
| G3  | ANXA1      |
| G3  | LCN2       |
| G3  | IFITM1     |
| G3  | ALDH2      |
| G3  | CEBPE      |
| G3  | C15orf48   |
| G3  | ADPGK      |
| G3  | CD177      |
| G3  | ZMPSTE24   |
| G3  | ORM2       |
| G3  | LTA4H      |
| G3  | DSTN       |
| G4  | S100A8     |
| G4  | S100A6     |
| G4  | CAPG       |
| G4  | MMP8       |
| G4  | MGST1      |
| G4  | THBS1      |
| G4  | ADPGK      |
| G4  | CD177      |
| G4  | LGALS3     |
| G5a | CSF3R      |
| G5a | MCL1       |
| G5a | CREG1      |
| G5a | SELL       |
| G5a | FOSL2      |
| G5a | ASPRV1     |
| G5a | IL1B       |
| G5a | CSTA       |
| G5a | DUSP1      |
| G5a | GRINA      |
| G5a | CLEC4D     |
| G5a | BTG1       |
| G5a | ARG2       |
| G5a | FOS        |
| G5a | YPEL3      |
| G5a | SLC16A3    |
| G5a | SIRPB1     |
| G5a | CYP4F3     |
| G5a | KLF2       |
| G5a | IL36G      |
| G5a | AC068580.4 |
| G5a | RDH12      |
| G5b | ISG15      |
| G5b | GBP2       |
| G5b | MNDA       |
| G5b | RSAD2      |

|     |          |
|-----|----------|
| G5b | STAT1    |
| G5b | FGL2     |
| G5b | LY6E     |
| G5b | IFITM1   |
| G5b | OAS3     |
| G5b | OASL     |
| G5b | SLFN12   |
| G5b | ZBP1     |
| G5b | SLFN5    |
| G5b | CMPK2    |
| G5b | TRIM5    |
| G5b | XAF1     |
| G5b | IFIT3    |
| G5b | ISG20    |
| G5b | IRF7     |
| G5b | IRGM     |
| G5b | RTP4     |
| G5b | IFIT1B   |
| G5c | PTAFR    |
| G5c | CSF3R    |
| G5c | TXNIP    |
| G5c | RNF149   |
| G5c | IL1B     |
| G5c | CXCR4    |
| G5c | DUSP1    |
| G5c | LST1     |
| G5c | PLA2G7   |
| G5c | MARCKS   |
| G5c | FGL2     |
| G5c | TSC22D3  |
| G5c | IFITM1   |
| G5c | CDK2AP2  |
| G5c | BTG1     |
| G5c | TNFAIP2  |
| G5c | SIRPB1   |
| G5c | CST3     |
| G5c | GM2A     |
| G5c | HBA1     |
| G5c | RPS27    |
| G5c | GNGT2    |
| G5c | NINJ1    |
| GM  | LTF      |
| GM  | CAMP     |
| GM  | SYNE1    |
| GM  | CYBB     |
| GM  | CPNE3    |
| GM  | ANXA1    |
| GM  | LCN2     |
| GM  | IFITM1   |
| GM  | CKAP4    |
| GM  | THBS1    |
| GM  | C15orf48 |
| GM  | ADPGK    |
| GM  | C3       |
| GM  | CD177    |
| GM  | GOLIM4   |
| GM  | DSTN     |

| type       | gene   |
|------------|--------|
| cell cycle | CCNA1  |
| cell cycle | CCND3  |
| cell cycle | CCNI2  |
| cell cycle | CCNT1  |
| cell cycle | CCNA2  |
| cell cycle | CCNE1  |
| cell cycle | CCND1  |
| cell cycle | CCNT2  |
| cell cycle | CCNJ   |
| cell cycle | CCNB1  |
| cell cycle | CCNE2  |
| cell cycle | CCND2  |
| cell cycle | CCNY   |
| cell cycle | CCNB2  |
| cell cycle | CCNF   |
| cell cycle | CCNJL  |
| cell cycle | CCNB3  |
| cell cycle | CCNG2  |
| cell cycle | CCNL1  |
| cell cycle | CCNYL1 |
| cell cycle | CCNG1  |
| cell cycle | CCNK   |
| cell cycle | CCNC   |
| cell cycle | CCNI   |
| cell cycle | CCNO   |
| cell cycle | CCNYL2 |
| cell cycle | CCNH   |
| cell cycle | CCNL2  |
| cell cycle | CCNYL3 |
| cell cycle | CCNQ   |