

SOCS proteins in regulation of receptor tyrosine kinase signaling

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Supplementary materials

Figure S1: Mutation in SOCS proteins according to the Cosmic database.

<http://cancer.sanger.ac.uk/cancergenome/projects/cosmic/>

SOCS1 I T SH TT FF S N M C RE
MVAHQVAAD NAVSTAAEPR RRPEPSSSS SSPAAPARPR PC^SPAVPAPAP GDTHFRFRS HADY^NRRIT^MTRA SALLDACG^FY WGPLSVHGAH
ERLRAEPVGT FLVRDSRQRN CFFAL^{R/N}SVKMA SGPTSIRVHF^KQAGR^CFHLDGS RESFDCLFEL LEHYVAAP^HRLGAPLRQR VRPLQELCRQ
RIVATVGREN LARIPLN^SPVL RDYL^SSSFP^SFQ I

SOCS2 MTLRCLPSG NGGEG^ATRSQW GTAGSAE^DEPS PQAARLAKAL RELGQTGWYW^GSMTVNEAKE KLK^DE^APEGTF LIR^NDSSHSYD^CLLT^SISVK^{TSA}
GPTNL^QRIEY^QDGKFR^LLD^SII CVKSKL^HQ^FD SVVHL^NID^YYV QM^CCKDKRTGP EAPRNGTVHL YLTKPLY^ATSA PSLQL^RHL^CR^LLT INKCTGAIWG
LPL^LTR^QL^DKDY LE^EYK^FQV

SOCS3 MVTHSKFPAA GMSRPLD^TSL RLKTFSSKSE YQLVVNAV^NRK LQES^SGFYWSA VTG^SGEANLLL SAEPAGTFLI R^DSSDQRHFF TLSVKTQSGT
KNL^{C/H/L}RIQCEGG FSLQSD^GPR^STQVPV^HRFDCV LKLVHHYMP PGAPSFPSPP TEPSSVEPEQ PSAQL^SPL^SPGSP PRRAYIYSG GEKIPLVLSR
PLSSNVATLQ HLCRKT^IVNGH LDSYEKVTQL PGPIREFLDQ YDAPL
MAENNENISK NVDVRPKTSR^SRSADR^SKD^SGY VWSG^NKL^SWS KKSESYSDAE TVNGIEKTEV SLRNQERKHS CSSIELDLDH SCGHRFLGR^S
LKQKLQDAVG QCFFPIKNCSS RHSSGLPSKR^EKIHISELMLD KCPFP^RSD^LAFRWHFIK^RH^TAPIN^SK^SDE WVSTD^LRS^QTE LRDGQL^RK^RRN
MEENINCF^LFSH TNV^QPC^VIT^T DNALCR^NEG^QPM TG^FSV^MNL^VSN NSIEDSDMDS DDEILT^CL^TS^S SRKRNKPKWD L^DDEIL^YQLET PKYHTQIDY
VHCL^AVP^QDLLQ INN^NPCY^WGV MDKYAAEALL EGKPEGT^FLL RDSAQEDY^LF SVSFR^RYS^SRS LHARIEQWNH NFSFDAH^DPC VFHSPDITGL
LEHYK^DPSAC MFFEPLLSTP LIRTFP^FSLQ HICRTVIC^NC TTYDGIDALP I^FSSMKLYL^KEYHYK^RK^VRV LRIDAPEQQC
MDKVGKMWNN FKYRC^RQNLFG HEGGSRSENV DM^SNSR^NCLSV KEK^SNI^SIGDS TPQQSSPLR ENIALQLGLS^NPK^NSS^RRN^QNCATE^IPIQ^V
EIS^KE^KDN^SCVTPG^YTR^LAR RDSYSRHAPW^VGG^{W/E/V}KK^HSC^ST^NKT^QSS^LDAD^KK^FGRTRSG^LQ RRER^RY^GV^SS VHD^MDSV^SSR TVGSRSLR^KQR

SOCS4 LQDTVGLCFP MRTYSKQSKP LFSNKRKIHL SELML^DEK^CPF PAGSDLAQKW HLIKQHTAPV SPHSTFFDTF^SDP^SSLVSTED^EEDRLRERRRL
SIEEGVDPPP NAQIHTFEAT AQVNPLYKLG PKLAPGMTEI SGDSSAIPQA NCD^SEEDTTT LCLQSR^RCK^QQ RQISGDSHTH^IVS^RQGAWK^VH
TQIDIYHCLV PDLLQITGNP CYWGVMDRYE AEALLEGKPE GTFLLRDSAQ EDYLFSVSFR RYNRSLHARI^{Q/L}EQWNHNFSD^VAH^DPCVFHSS
TVTGLLE^VHY^EK^LDPS^SCMFFEP LLT^MSLNRTF PFSLYQIC^HRA VICRCTTYDG IDGLPLP^SML QDFLKEYHYK QKV^TRV^WLER EPV^KAK
MKKISL^NKT^LR KSFNL^NKSKE ETDFMVVQ^QPLASDFGKDD SLFG^SCYGKD MASCDINGED EKGK^NRSK^SESLM^VG^TL^KR^RLSAKQK^SKG^K
AG^TPSGSSAD EDTFSSSSAP IVFKD^VRAQR PIRSTSLRSH HYPAPW^LPLR PTNSEETCIK MEVRV^KAL^VH SSSP^SAL^NG VR^KDF^HDL^QS

SOCS5 ETTCQEANS LKSSASHNGD LHLHLDEHVP VVIGLMP^DGY IQYTVPLDEG MYPLEGSRYS CLDSSSPMEV^VAVPPQVGG^RAFPEDESQVD
QDLV^TA^PE^IF VDQSV^DNGLLI GTTGVM^LQSP R^SAG^HD^VY PPL SPLPPMQNN QIQ^RN^FSGLT GTEA^LH^VAESM^HRCHLN^FDPNS APG^DVARV^LY^S
VQSSGPMVVT SLTEELK^LA KQG^WY^WGPIT RWEAEGKLAN^VPD^GSFLVRD SSDRYLLSL^SFR^SHGK^TLH TRIE^HSN^GRF SFYEQPDVEG
HT^SIV^DL^IEH SIRD^ENGAF CYSRSLRPGS ATYP^VRLTNP VSR^FMQV^RSL QYL^CRFVIR^QYTRIDLIQKL PLPNK^MKDY^LQEKHY
MVFRNVGRPP EEEDVEAAPE PGPSELLCPR HRCALDPKAL PPGLALERTW GPAAGLEAQL AALGLGQ^PPAG PGVKT^VGGGC CPCPCPPQPP
PPQPQPPAAA PQAGEDPTET SDALLVLEGL ESEAESLETN SCSEEESSP GRGGGGGGRL^MLQPPGPELP PVPFPLQDLV PLGRLSRGEQ

SOCS6 QQQQQQPPPP PPPPPGLRPL LAGPSRKG^SF KIRLSRLFRT KSCN^GGGSGG DGTGKRPSGE LAASAA^NSLTD MGGSAGRELD AGRKPKL^TRT
QSAFSPVSFS PLFTGETVSL VD^VDISQRGL TSPHPPTPPP PRRSLSLLD DISGLTPTSV LV^LPM^PGS^SLQ SFPLPPPPPP HAPDAFPRIA
P^LIRAAESLHS QPPHLQ^CPL YRPDSS^SFAA SL^RRELEKCGW YWGP^MNWEDA EMKLGK^PDPG SFLVRDSSDP^CRY^ILSLS^FRS QGITH^HTRME
HYRGT^FSLWC H^PK^FED^RCQS VVEFIKRAIM^HSK^NG^KFLYF LRSRV^PGLPP TPVQLLYPVS RFSNVKSLQH LCRFRIRQLV RIDHI^PDLPL
PKPLISYIRK FYYYPQEEV YLSLKEAQLI SKQKQEVEPS T

SOCS7 MYLEHTSHCP HHDDDTAMDT PLPRRPLLA VERTGQRPLW APSLEL^PPKV MQ^SPLPAGAF^LEEVAEGTPAQ TESEPKVLD^DPE^DLLCIAKT
F^LSYLRESGWY WGSITASEAR QHLQKMP^EGT FLVRDSTHPS YLFTLSVKTT RGPTNVRIEY ADSSFR^LDSN CLSRPRILAF PDVSVLQHY
VASCTADTRS DSP^YDPAPTPA LPMPKEDAPS DPALPAPPPA TAVHLKLVQV FVRR^NSSARSL QHLCRLVINR LVADVDCLPL PR^RRMADYLRQ
YPFQL