

Figure S1. Alignment of zinc fingers of 36 predicted KLF18 proteins. Conserved cysteines and histidines involved in metal binding of zinc fingers are on black background. Three conserved DNA base-interacting arginines are shaded in magenta. Three negatively-charged residues interacting with the three arginines are shaded in dark grey. Substitutions in these conserved residues are colored red. Insertions and deletions are highlighted in cyan. Color coding of species names is as follows: black: Euarchontoglires; red: Laurasiatheria; green: Afrotheria; and magenta: Xenarthra.

human	CTYEDCKMSYSKACHLRT ^{EMRKH} HTGK ^{EPYV} CDVEGCTWKFARS ^{DELNR} HK ^{KRHT} GERPYLCS ^{IC} SKNFARS ^{SDHLKQ} HA-KVH
chimp	CAYQDCGKSYTKSHHLKDEMRKHHTGK ^{EPV} CNAPECEWKFTRL ^{LLR} REK ^{NK} ENR ^{KRSY} FC SM CN ^{KSF} SRLCYLRQHE ^{KKH}
gorilla	CTYEDCKMSY ^{GK} ACHLRT ^{EMRKH} HTGK ^{EPYV} CDVEGCTWKFARS ^{DELNR} HK ^{KRHT} GERPYLCS ^{IC} SKNFARS ^{SDHLKQ} HA-KVH
orangutan	CTYEDCKMSYSKACHLRT ^{EMRKH} HTGK ^{EPYV} CDVEGCTWKFARS ^{DELNR} HK ^{KRHT} GERPYLCS ^{IC} SKNFARS ^{SDHLKQ} HA-KVH
gibbon	CTYEDCKMSYSKACHLRT ^{EMRKH} HTGK ^{EPYV} CDVEGCTWKFARS ^{DELNR} HK ^{KRHT} GERPYLCS ^{IC} SKNFARS ^{SDHLKQ} HA-KIH
rhesus	CTYENC ^{KKS} YK ^{KACH} LRT ^{EMRKH} HTGK ^{EPY} ICDVEGCMWKFTRS ^{DELNR} HK ^{KRHT} GERPYLCS ^{IC} NKNFARS ^{SDHLKQ} HA-KVH
baboon	CTYENC ^{KKS} YK ^{KACH} LRT ^{EMRKH} HTGK ^{EPY} ICDVEGCTWKFTRS ^{DELNR} HK ^{KRHT} GERPYLCS ^{IC} NKNFARS ^{SDHLKQ} HA-KVH
squirrel_monkey	CPHEDCKMSYSKACHLRT ^{EMRKH} HTGK ^{EPV} CDVEGCTWKFIRS ^{DELNR} HK ^{KRHT} GERPYLCPV ^C SKNFARS ^{SDHLKQ} HA-KVH
marmoset	CPHKDC ^{KNS} YSKACHLRT ^{EMRKH} HTGK ^{EPV} CDVEGCTWKFGRS ^{DELNR} HK ^{KRHT} GERPYLCPV ^C SKNFARS ^{SDHLKQ} HG-KVH
bushbaby	CAYEDCGKSYAKSYHLR ^{IEQRKH} HTGK ^{EPYA} CDVTGCTWRFPRS ^{DELKR} HK ^{KRHS} GERPYRCMK ^{CR} KNFARS ^{SDHLRQ} HE-KMH
tree shrew	CTYQDCGKSYAKSSHLR ^{IEERKH} HTGK ^{EPYV} CNVMGCTWKFPRS ^{DELSR} HK ^{KRHS} GERPYLCTD ^C NRNFARS ^{SDHLKQ} HQ-RVH
mouse	CSKENCGKAFVKSSQLRE ^{IERI} HTGK ^{EPYI} CTYYPCTWKFARQ ^{YLA} RHK ^{KRHT} GYP ^{PFK} CENC ^{DM} TYSRSD ^{HLKA} HI-KR
rat	CHY ⁻⁻⁻ CGHSF ^{SKS} SHLTG ^{HIRKH} HTGK ^{EPYK} CSR ⁻⁻⁻ CTWTF ^{SRS} DEL ^{TR} EMR ^{KHT} GDR ^{PHQ} CQ ^{IC} Y ^{TTY} PRSD ^{NLNE} HV-KKH
kangaroo_rat	CTYPGCGKSYLKP ^{SHLQ} IE ^{NRKH} HTGK ^{EPYV} CDVTGCTWKF ^{SRS} DEL ^{KR} HK ^{RTH} SQ ^{DRPY} LCT ^{CK} NKNFARS ^{DHLVQ} HE-RVH
naked_mole-rat	CPHQDCGKSYARSSCLRV ^{IEQRTH} S ^{GKPYA} CNVQCGEWF ^{SRS} DEL ^{KR} EM ^{RRHT} GERPYKCEA ^{CS} KS ^{FARS} DHL ^{TQ} HQ-RVH
guinea_pig	CPHQCGKSYMRP ^{SHLRV} IEQR TH S ^{GQKYA} CNVQCGEWF ^{FNR} DEL ^{KR} EM ^{RRHS} GERPYTCPI ^C Q ^{KKF} PRSD ^{HVIQ} HQ-RVH
squirrel	CTYQDCGKCYTKY ^{SHLQ} IE ^{ERKH} HTG ^{DKPYV} CNEIGCTWKFTRS ^{DELRR} HK ^{KRHS} GERPYLCTR ^{CK} TFARS ^{DHLKQ} HE-RVH
rabbit	CTYPD ^{CGK} SYK ^{SSYLQ} IE ^{ERKH} HTGK ^{EPY} ECSEEGCPWF ^{SRS} DEL ^S RHK ^{KRHS} GERPYTCT ^{CK} DK ^{SFARS} DHL ^{RQ} HQ-KVH
pika	CTYPD ^{CGK} SYK ^{SPSHL} IE ^{ERRH} GERPYACDITGCTWTF ^{SRK} DEL ^{TR} HK ^{KRHS} GERPYMCPK ^C NK ^{TFARS} DHL ^{VQ} HQ-KVH
alpaca	CTYQDCGKSYKSSHLR ^{IEERL} HT-----
sheep	CTY ⁻⁻⁻ NCGKAYAKSSHLR ^{IEERV} HTGK ^{EPYK} CNANGCTWAF ^{SRS} DEL ^{LR} HK ^{KRHT} TRERPYLCTI ^C NK ^{DFARS} DHL ^{KQ} HQ-RVH
cow	CTYKNC ^{GK} AYAKSSHLR ^{IEERV} HTGK ^{EPYK} CNVNGCTWAF ^{SRS} DEL ^{NR} EN ^{KRHT} TRERPYLCAI ^C DK ^{DFAR} PDHL ^{TQ} HQ-RVH
dolphin	CTYQCGKSYKSSHLR ^{IEERL} HTGK ^{EPYK} CNAK ^G CTWAF ^{SRS} DEL ^{NR} EM ^{RKHT} TRERPYQCT ^{CK} DR ^{NFARS} DHL ^{KQ} HQ-RVH
horse	CTYQDCGKSYTKP ^{SHLRI} IE ^{ERTH} HTGK ^{EPY} CNVK ^G CTWKF ^{SRS} DEL ^{NR} HK ^{KRHS} GERPYWCT ^{CK} CH ^{RTFARS} DHL ^{KQ} HE-RVH
cat	CTYQDCGKSYTKP ^{SHLRI} IE ^{ERKH} HTGK ^{EPY} CNVK ^G CTWKF ^{PRS} DEL ^S RHK ^{KRHS} GERPYLCT ^{CK} NRNFARS ^{DHLKQ} HQ-RIH
dog	CTYQDCGKSYTKP ^{SHLRI} IE ^{ERKH} HTGK ^{EPYK} CNVK ^G CTWRF ^{PRS} DEL ^{NR} HK ^{KRHS} GERPYLCT ^{CK} NRNFARS ^{DHLKQ} HQ-RIH
panda	CTYQDCGKSYTKP ^{SHLRI} IE ^{ERKH} HTGK ^{EPYK} CNVK ^G CPWF ^{PRS} DEL ^{NR} HK ^{KRHS} GERPYLCT ^{CK} NRNFARS ^{DHLKQ} HQ-RIH
microbat	CTYQDCQKSYKSSCLQ ^{IEDRKH} HTGERPYKCNVKGCTWEFARS ^{DELKR} EN ^{KKHS} GERPYLCT ^{IL} CD ^{RRFARS} DHL ^{KQ} HQ-KVH
megabat	CTYQDCGKSYKSR ^{SHLQ} IE ^{ERKH} HTGK ^{EPYK} CNVK ^G CTWEFARS ^{DELNR} HK ^{KRHS} GERPYLCT ^{IL} CNKNFARS ^{DHLKQ} HQ-RVH
shrew	CTFQCGGKQYAKPYQLR ^{IEERV} HTG ^{DKPYI} CDVKGCPWKFARS ^{DELSR} HK ^{KKHT} GERPYRCPO ^C PM ^{DFAR} DHL ^{KQ} HA-RVH
elephant	CTYQDCGKSYLRRARL ^{IEECI} HTGK ^{EPYI} CNVK ^G CAR ^F SRS ^{DL} YRHK ^{KKH} NGERPYVCTR ^C NKNFARS ^{DHLKL} HQ-KSH
manatee	CTYQCGKSYSRHSRLR ^{IEECI} HTGK ^{EPYI} CNVK ^G CTWKF ^{SRLD} LN ^{RHK} KR ^{HS} GERPYLCT ^{TC} NRNFARS ^{DHLKL} HQ-KSH
elephant_shrew	CPYQCGGKFFSKLSYFQ ^{KIQR} IEHTG ^{MKV} FV ^{CNVK} GCMQ ^{KFC} SD ^{GLGR} KK ^{IHS} NERPYLCT ^{VC} CN ^{KGF} SRS ^{HLKQ} HQ-KTH
cape_golden_mole	CTYQDC ^{EKS} YSTHANLR ^{KEFI} HTG ^{KKPYI} CNVK ^G CTWKF ^{SRS} DL ^{KRHT} KK ^{HS} GERPYLCT ^{TC} NRNFARS ^{DHLKQ} HQ-KQH
armadillo	CKHQDCGKSF ^{SKASYI} Q ^{IEERV} HS ^{GKPY} SCDVEGCTWKFTRS ^{DELSR} HK ^{KRHS} GERPYPCT ^{CK} NR ^{SFARS} DHL ^{KQ} HQ-KIH
sloth	CTFQCGGKSF ^{SKSYLQ} IE ^{ERKH} HTGK ^{EPY} CNVK ^G CTWKF ^{SRT} DEL ^S RHK ^{KRHS} GERPYPCT ^{CK} NR ^{SFARS} DHL ^{KQ} HE-RVH