



**Table 2. ClustalW Sequence Alignment of Human FGFs based on AUG/Methionine Start Codon.**

FGF-1	-----MÆGEITTF-----ALTEKFN-----LPP-GNYKK--P--K--ILYCSNGG---HFLR	
FGF-2	-----MAAGSITTL-----ALPEDGGS-----GAFPP-GHFKD--P--K--ILYCKNGG---FFLR	
FGF-7	-----MH-----KWILTWILPTLLYRS-----CFHIICLVGTISLACN-----DMT-PEQMATNVN-CSS-PE--RHTRSY--DYMEGDRIVR--RLFCRTG----WYLR	
FGF-10	-----MW-----KWILTHCASAPHLPGCCCCFLFLVSSVPTVCALGQ-----DMVSPËATNSSSSSFSS-PSSAGRHVRSY--NHLQG-DVRWR--KLFSFTK----YFLK	
FGF-22	-----MR-----RRLWLGLAWLLLARA-----PDAAGTPSA-----S--RGPRSY--PHLEG-DVRWR--RLFSSTH----FFLR	
FGF-9	-----MAPLGEVGNYPGVQD-----AVPFGNVPLP-----VDSPVLLSDHLGQSEAGGLPRGPAVTDL--DHLKG-ILRRR--QLYCRTG----PHLE	
FGF-16	-----MAEVGVGFASLDWD-----LHGFSSSLGNVPLA-----DSPGLNERLQGIËG-KLQRG-SPTDF--AHLKG-ILRRR--QLYCRTG----PHLE	
FGF-20	-----MAPLÆVGGFLGGLEG-----LQQVQVSHFLLPP-----AGERPPLLGERRSAAER-SARGGPGAQL--AHLHG-ILRRR--QLYCRTG----PHLQ	
FGF-4	-----MS-GPGTAAVALLPAVLLALLAPWAGRGAAAPTAPNGTLEAEL-----ERRWESLVALSLARLPVAAQPKEAAVQSGAGDYLLG-IKRLR--RLYCNVGI----GFHLQ	
FGF-6	MALGQKLFITMSRGAGRLQGTLLWLVFLGILVGMVVP--SPAGTRANNLLDS-----RGWGTLLSRSRAGL--AGEIAGVNWESG--YLVG-IKRQR--RLYCNVGI----GFHLQ	
FGF-12	-----MAAAIASSLIRQKRQARESDRVSASKRSSPSKDG-----RSLCERHVLGVFSKVRFCSGRKRPRVRRP-EPQLKGIVT----RLFSQOQ----YFLQ	
FGF-14	-----MAAAIASGLIRQKRQAREQHWRPSPASRRRSPSKN-----RGLCNGNLVDIFSKVRI FGLKKRRLRQ--DPQLKGIVT----RLYCRQG----YFLQ	
FGF-13	-----MAAAIASSLIRQKRQARE--EKSNAACKVSSPSKG-----KTSCKNKNLNVFSRVKLFSGKKRRRRP--EPQLKGIVT----KLYSROG----YHLQ	
FGF-11	-----MAALASLIRQKREVREPGGSRFVSAQRVRCPRT-----KSLCQKALLIILLSKVRCLCGRPARDRGP-EPQLKGIVT----KLYCROG----FYLQ	
FGF-8	-----MGSPRSALS-CLLLHLLVLCQAQEGPGRPALGR-----ELASLFRAGREPQGVSQHVREQLVTDQLSRRIRTY--QLYSRTSG----KHVQ	
FGF-17	-----MGAARLLNLTCLQLLLCCQTO-----G-----E-----NHPSPNFNQYVDRDQAMTDQLSRQRËRY--QLYSRTSG----KHVQ	
FGF-18	-----MYSAPSACT-CLCLHFLLLCFVQ-----G-----VLVAEENVDRIHVENQTRARDDVSRKQLRLY--QLYSRTSG----KHVQ	
FGF-3	-----MGLIWLHLLSLEPG-----G-----WPAAGPGARLR--RDAGGRGGVYEHLLG-APRR--RLYCATK----YHLQ	
FGF-5	-----MSLSFLLLLFFSHLILSAWAHGEKRLAPKQPGPAATDRNPIGSSSRQSSSSAMSSSSASSPAAISLGSQSGLEQSSPQWSPGRRTGS-LYCRVGI----GFHLQ	
FGF-19	-----MRSGCVVHVWILAG-----G-----LWLAVAGR-----PLAFSDAGPHVHYGWGDPRIRL--HLYTSGPHGLSSCFLR	
FGF-21	-----MDSDETFEHS-----G-----LNVSVLAGLLGACQAHPIPDSSPLLQFPG-QVQR--YLYTDDAQQT-EAHL	
FGF-23	-----G-----MLGARLRLWVLCVCSMSVLRAYPNASPLLQ-SSWGGLIHLHYTATARN--SYHLQ	
FGF-1	ILPDGTVDGTRDRSDQHIQLQLSAËSVG-EVYIKSTETGQYLAAMDTDGLLYGSQT-PNEECLFLERLEENHYNTIYSKKHAËK-----N-WFVSLKKNKSGCKRGP--RTHYG	
FGF-2	IHPDGRVDGVREKSDPHIKLQQAËERG-VVSIKGVCANRYLAMKEDGRLLASKC-VTDECFPERLESNNYNTYRSRKYTS-----WYVSLKRTGQYKLGs--KTGPG	
FGF-7	IDKRKGVKGTQEMKNNYIMEIRTVAVG-IVAIKGVSEFYLAMNKEGKLYAKKE-CNEDCNFKELILENHYNTIYSAKWTH--NG-----GEMFVALNKGIPVRGK--KTKKE	
FGF-10	IEKNGKVSQTKKENCPSYILEITSVEIG-VVAVKAINSNYILAMNKGKLYGSKE-FNNDCKLKERIEENGYNTIYSAFNWQH--NG-----RQMYVALNKGAPRRGQ--KTRRK	
FGF-22	VDPGGRVQGTQRWRHGQDSILEIRS VHVIG-VVVIKAVSSGFYVAMNRRGLYGSRL-YTDCRFREIREENGHNTIYSAQRWR--RG-----QPMFLALDRRGQPRPGG--RTRRY	
FGF-9	IFPNGTIQGTTRKDHRSRFGILEPISIAVG-LVSI RGVDSGLYLG MNKEGELYSEK-LTQECVFRËQFEENWYNTIYSSNLYKHVDTG-----RRYVALNKDGTËREGT--RTKRH	
FGF-16	IFPNGTVHGTRHDHRSRFGILEPISIAVG-LISIRGVDSGLYLG MNKEGELYSEK-LTRECIVFRËQFEENWYNTIYSA TLKXSDSE-----RQYVALNKDGSËREGY--RTKRH	
FGF-20	ILPDGVSQGTQRDHSRFGILEPISIAVG-LVSI RGVDSGLYLG MNKDGELYSEK-LTSECFRËQFEENWYNTIYSSNLYKHVDTG-----RRYVALNKDGTËRPGA--RSKRH	
FGF-4	ALPDGRIGGAHAD-TRDSLLELSPVERG-VVSI RGVASRFFVAMSSKGLYGS PF-FTDECTFKEILLPNNYNAYESYKYPG-----MFIALSXNGTKKGN--RVSPT	
FGF-6	VLPDGRISGTHEE-NPYSLEISTVERG-VVSLFGVRSALFVAMNSKGRLYATPS-FQËECKFRËTLLPNNYNAYESDLYQG-----TYIALSKYGRVKRGS--KVSPI	
FGF-12	MHPDGTIDGTDKENDSYTLFNLI PVGLR-VVAIQGVKASLYVAMNGEGYLYSSDV-FTPECKFKESVFNENYVYIYSS TLYRQËESG-----RAWFLGLNKEGQIMKGN--RVKKT	
FGF-14	MHPDGALDGTDDSTNSTL FNLI PVGLR-VVAIQGVKAGLYIAMNGEGYLYPSEL-FTPECKFKESVFNENYVYIYSS MLYRQËESG-----RAWFLGLNKEGQAMKGN--RVKKT	
FGF-13	LOADGTIDGTDKEDSTYTLFNLI PVGLR-VVAIQGVQTKLYLAMNSEG YLYTSEL-FTPECKFKESVFNENYVYIYSS MLYRQËESG-----RGWYFLNKEGEIMKGN--HVKKN	
FGF-11	ANPDGSIQGTËDËTSSFTFNLI PVGLR-VVTIQSAKLGHYAMNAËGLYSSPH-FTABCRFKËCVFNENYVYIYSAALYRQRSSG-----RAWYLGDKËGQVMKGN--RVKKT	
FGF-8	VLANKRINAMAËDGDËPFAKLI VËTDTFGSRVVRGAËBTGLYICMNNKKGKLI AKSNGKGDVFTËIVLENNYTALQNAKYËG-----WYMAFTRKGRËRKS--KTRQH	
FGF-17	VTG-RRISATAËDGNKFAKLI VËTDTFGSRVRI KGAËSEKYICMNNKKGKLI KGP SGKSKDCVFTËIVLENNYTALQNAKYËG-----WYMAFTRKGRËRQAS--RSRQN	
FGF-18	VLG-RRISARGËDGDYKQALLVËTDTFGSQVRI KKGËTËFYLCMNNKKGKLI VGGKPDGTSKËCVFIEKVLËNNYTALMSAKYSG-----WYVGFTRKGRËRKGË--KTRËN	
FGF-3	LHPSGRVNGSLEN-SAYSILEITAVEVG-IVAIRGLFSGRYLAMNKRGLYASEH-YSAËCFËVERIHELGYNTIYSA RLRYTVSSTPGARRQPSAËRLWVSVNGKGRËRGRF--KTRRT	
FGF-5	IYPDGKVNGSHEA-NMLSVLËIFAVSQG-IVGIRGVFSNKFLAMSKKGKLI HASAK-FTDDCKFRËFRËQËNSYNTIYSA AIHRTEKTG-----REWYVALNKRKGAKGRCSËRVPKQP	
FGF-19	IRADGVVDCARGQ-SAHSLEIKAVALR-TVAIKGVHSVRYLCMGADGKMQGLLQYSEEDCAËFËËIRPDGYNVYRS EKHRLP-----VSLSSAKQRQLYK--NRGF	
FGF-21	IREDDTVGGAAADQ-SPESLQLKALKPG-VIQILGVKTSRFLCQRPDGALYGLSHFPDËEACSFRELLLEDGYNVYQS EAHGLPLHLP-----GNKSPHRDPAPRGPAPFLPLPG	
FGF-23	IHKNGHVDGAPHQ-TIYSALMIRSEADG-FVVIITGVMSRRYLCMDFRGNI PGSHYFDËENCRFQHQTLËNGYDVYHS PQYHFLVSLG-----RAKRAFLPGMNPËPYSQFLSRNE	
FGF-1	QKAILF--LPLPVSSD-----	
FGF-2	QKAILF--LPM SAKS-----	
FGF-7	QKTAHF--LPMAIT-----	
FGF-10	NPSAHF--LPMVHS-----	
FGF-22	HLSAHF--LPLVLS-----	
FGF-9	QKFTHF--LPRVPDPKVP-----ELYKDILSQS-----	
FGF-16	QKFTHF--LPRVPDPSKLP-----SMSRDLFHYR-----	
FGF-20	QKFTHF--LPRVPDPERV-----ELYKDLLMYT-----	
FGF-4	MKVTHF--LPRL-----	
FGF-6	MTVTHF--LPRI-----	
FGF-12	KPSSH F--VPKPIËVCMYR-----EPLSHEIGËKQGR-----SRKSSGTPTMNGKGVNQDST-----	
FGF-14	KPAAHF--LPKLËVAMYR-----EPLSHDVËTVPKPGVTPSKSTASAIMNGGKPVNKS KTT-----	
FGF-13	KPAAHF--LPKPLKAMYK-----EPLSHDLTEFRSRS GTPTKRSVSGVLNNGGKSM SHNEST-----	
FGF-11	KAAAHF--LPKLËVAMYQ-----EPLSHSVËASPS-----SPPAP-----	
FGF-8	QREVFH--MKRLPRGHHTT-----EQSLRFEFLNYPFTRSLRGSQRRTWAËEPR-----	
FGF-17	QREAHF--IKRLYQQLPFPN--HAËKQKQFËVGSAPTRR-----TKRTRRPQPLT-----	
FGF-18	QQDVHF--MKRYPKGQPEL-----QKPKYTTVTKRSR-----RIRPHTPA-----	
FGF-3	KQSSLF--LPRVLDRHDEMVRQLQSGLP RPPKGVQPRRRRQKQSPDNLEP SHVQASRLGSQLEASAH-----	
FGF-5	HISTHF--LPRFKQSEQPELSFTVTVËEKNPSPISKIPLSAPRKNNTNSVKYRLKFRFG-----	
FGF-19	LPLSHF--LPLMPVËËËDLRGLHËSDMFSSPLETDSMDPFGLVTLGËAVRSËPFEK-----	
FGF-21	LPPALP--EPPGILAPQPDVGSDDPLSMVGPQSGRSPSYAS-----	
FGF-23	IPLIHFNTPIRRHRTSAËDSDËRDLNVLKPRARMTAPAPASCQËLPSAËDNPSMASDPLGVVRGGRVNHAGGTGËGCRPFAKFI	

**Nuclear Localization Sequence**

**FGF Core Domain**

**Heparin-binding Motif**

FGF-22 (Accession # AB021925) and FGF-23 (Accession # AB037973) have only recently been reported in GenBank.