Draft Sequence of Human Fer1L4, assembled based on predicted chimpanzee sequence.

Top(red): predicted sequence of chimpanzee (Pan troglodytes) Fer1L4 (XP_525311)

Bottom(black): human sequence assembled from predicted partial sequence of Fer1L4 (CAI42838) and translated human ESTs.

The beginning of the translated region is unclear. None of the human ESTs include the initial five amino acids of XP_525311 in the same reading frame as the subsequent amino acids. It is possible that the methionine at position 204 shown in pink is the beginning of the translated region.

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   1 maltvrvqrl tgltgthdrq vkltfrgftq ktrkihcgpe adigelfrwp hygaplagec
         RVQRL TGLTGTHDRQ VKLTFRGFTQ KTRKIHCGPE ADIGELFRWP HYGAPLAGEC

  61 lsvqvvncsr vfsprplgtl vislqqlqna ghlvlrealv denlrvspie veldlkyqpp
     LSVQVVNCSR VFSPRPLGTL VISLQQLQNA GHLVLREALV DENLQVSPIQ VELDLKYQPP

 121 egatgawsee dfgapiqdsf eliipnmgfq elepgeaqle rravalgrrl arslgqqdne
     EGATGAWSEE DFGAPIQDSF ELIIPNVGFQ ELEPGEAQLE RRAVALGRRL ARSLGQQDDE

 181 eneleleleq dlddepdvel sgvmfsplks raralahgdp fqvsraqdfq vgvtvleaqk
     ENELELELEQ DLDDEPDVEL SGVMFSPLKS RARALAHGDP FQVSRAQDFQ VGVTVLEAQK

 241 lvgvninpyv avqvgggrrv tatqrgtscp fyneyflfef hdtrlhlqdl lleitafhsq
     LVGVNINPYV AVQVGGQRRV TATQRGTSCP FYNEYFLFEF HDTRLRLQDL LLEITAFHSQ

 301 tlpfmatrig tfrmdlgiil dqpdgqfyqr waplhdprdt ragtkgfvkv tlsvrargdl
     TLPFMATRIG TFRMDLGIIL DQPDGQFYQR WVPLHDPRDT RAGTKGFIKV TLSVRARGDL

 361 pppmlppapg hcsdieknll lprgvpaerp warlrvrlyr aeglpalrpg llgslaralh
     PPPMLPPAPG HCSDIEKNLL LPRGVPAERP WARLRVRLYR AEGLPALRLG LLGSLVRALH

 421 dqrvlvepyv rvsflgqege tsvraeaaap ewneqlsfve lfppltrslr lqlrddaplv
     DQRVLVEPYV RVSFLGQEGE TSVSAEAAAP EWNEQLSFVE LFPPLTRSLR LQLRDDAPLV

 481 daalathvld lrrishpgra agfnptfgpa wvplygsppg aglrdslqgl negvgqgiwf
     DAALATHVPD LRRISHPGRA AGFNPTFGPA WVPLYGSPPG AGLRDSLQGL NEGVGQGIWF

 541 rgrlllavsm qvlegraepe ppqaqqgstl srltrkkkkk arrdqtpkav pqhldaspga
     RGRLLLAVSM QVLEGRAEPE PPQAQQGSTL SRLTRKKKKK ARRDQTPKAV PQHLDASPGA

 601 egpeiprame veveellplp envlapcedf llfgvlfeat midpavasqp isfeisigra
     EGPEIPRAME VEVEELLPLP ENVLAPCEDF LLFGVLFEAT MIDPTVASQP ISFEISIGRA

 661 grleeqlgrg sragegtega aveaqpllgp rpeeekeeee pgtpaqrpep mdgsgpyfcl
     GRLEEQLGRG SRAGEGTEGA AVEAQPLLGA RPEEEKEEEE LGTHAQRPEP MDGSGPYFCL

 721 plrhckpcmh vwscwedhtw rlqssncvrk vaerldqglq everlqrrpg pgacaqlkqa
     PLCHCKPCMH VWSCWEDHTW RLQSSNCVRK VAERLDQGLQ EVERLQRKPG PGACAQLKQA

 781 levlvagsrq fcrgaerrtm trpnaldrcr gkllvhslnl lakqglrllr glrrnnvqkk
     LEVLVAGSRQ FCHGAERRTM TRPNALDRCR GKLLVHSLNL LAKQGLRLLR GLRRRNVQKK
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 841 valakkllak lrflaeepqp plpdvlvwml sgqrhvawar ipaqdvlfsv veeergrdcg
     VALAKKLLAK LRFLAEEPQP PLPDVLVWML SGQRRVAWAR IPAQDVLFSV VEEERGRDCG

 901 kiqslmltap gaapgevcak lelflwlglg kqakactsel ppdllpepsa glpsslhrdd
     KIQSLMLTAP GAAPGEVCAK LELFLRLGLG KQAKACTSEL PPDLLPEPSA GLPSSLHRDD

 961 fsyfqlrahl yqargvlaad dsglsdpfar vlistqcqtt rvleqtlspl wnellvfeql
     FSYFQLRAHL YQARGVLAAD DSGLSDPFAR VLISTQCQTT RVLEQTLSPL WDELLVFEQL

1021 ivdgrrehlq eepplviinv fdhnkfgppv flgralaapr vklmedpyqr pelqffplrk
     IVDGRREHLQ EEPPLVIINV FDHNKFGPPV FLGRALAAPR VKLMEDPYQR PELQFFPLRK

1081 gpraagelia afelieldys grlepsvpsd vepqdlaplv ephsgrlslp pnvcpvlref
     GPWAAGELIA AFQLIELDYS GRLEPSVPSD VEPQDLAPLV EPHSGRLSLP PNVCPVLREF

1141 rvevlfwglr glgrvhlfev eqpqvvleva gqrvesevla syrerpnfte lvrhltvdlp
     RVEVLFWGLR GLGRVHLLEV EQPQVVLEVA GQRVESEVLA SYRESPNFTE LVRHLTVDLP

1201 eqpylqppls ilvierrafg rtvlvgshiv phmlrftfrg hedppeeege meetgdmmpk
     EQPYLQPPLS ILVIERRAFG HTVLVGSHIV PHMLRFTFRG HEDPPEEEGE MEETGDMMPK

1261 gpqgqksldp flaeagisrq llkpplkklp lggllnqgpg leedipdpee ldwwskyyas
     GPQGQKSLDP FLAEAGISRQ LLKPPLKKLP LGGLLNQGPG LEEDIPDPEE LDWGSKYYAS

1321 lqelqgqhnl dedemddpgd sdgvnlismv geiqdqgeae vkgtvspkka vatlkiynrs
     LQELQGQHNF DEDEMDDPGD SDGVNLISML GEIQDQGEAE VKGTVSPKKA VATLKIYNRS

1381 leeefnhfed wlnvfplsrg qgggqdgggee egsghlvgkf kgsfliypes eavsfsepqi
     LEEEFNHFED WLNVFPLYRG QGGQDGGGEE EGSGHLVGKF KGSFLIYPES EAVLFSEPQI

1441 srgipqnrpi kllvrvyivk atnlapadpn gkadpyvvvs agrerqdtke ryipkqlnpi
     SRGIPQNRPI KLLVRVYVVK ATNLAPADPN GKADPYVVVS AGRERQDTKE RYIPKQLNPI

1501 fgeilelsis lpaeteltva vfdhdlvgsd dligethidl enrfyshhra ncglasqyev
     FGEILELSIS LPAETELTVA VFDHDLVGSD DLIGETHIDL ENRFYSHHRA NCGLASQYEV

1561 dgynawrdaf rpsqilaglc qrcglpapey ragavkvgsk vfltppetlp pgispflssp
     DGYNAWRDAF WPSQILAGLC QRCGLPAPEY RAGAVKVGSK VFLTPPETLP PGISPFLSSP

1621 tvasgdpeea qallvlrrwq empgfgiqlv pehvetrply hphspgllqg slhmwidifp
     TVASGDPEEA QALLVLRRWQ EMPGFGIQLV PEHVETRPLY HPHSPGLLQG SLHMWIDIFP

1681 qdvpapppvd ikprqpisye lrvviwnted vvlddenplt gemssdiyvk swvkglehdk
     QDVPAPPPVD IKPRQPISYE LRVVIWNTED VVLDDENPLT GEMSSDIYVK SWVKGLEHDK

1741 qetdvhfnsl tgegnfnwrf vfrfdylpte revsvrrrsg pfaleeaefr qpavlvlqvw
     QETDVHFNSL TGEGNFNWRF VFRFDYLPTE REVSVWRRSG PFALEEAEFR QPAVLVLQVW

1801 dydrisandf lgslelqlpd mvrgargpel csvrlardga gsrcnlfrcr rlrgwwpvvk
     DYDRISANDF LGSLELQLPD MVRGARGPEL CSVQLARNGA GPRCNLFRCR RLRGWWPVVK
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1861 lkeaedvere gkveaefell tveeaekrpv gkgrkqpepl ekpgdrpkts fnwfvnplkt
     LKEAEDVERE
     AQEAQAGKKK RKQRRRKGRP EDLEFTDMGG NVYILT
                GKVEAEFELL TVEEAEKRPV GKGRKQPEPL EKP SRPKTS FNWFVNPLKT

1921 fvffiwrryw rilvllllly lltvflllvf ytipgqisqv ifrplhk
     FVFFIWRRYW RTLVLL LLV LLTVFLLLVF YTIPGQISQV IFRPLHK

*************** human sequence
RVQRL TGLTGTHDRQ VKLTFRGFTQ KTRKIHCGPE ADIGELFRWP HYGAPLAGEC
LSVQVVNCSR VFSPRPLGTL VISLQQLQNA GHLVLREALV DENLQVSPIQ VELDLKYQPP
EGATGAWSEE DFGAPIQDSF ELIIPNVGFQ ELEPGEAQLE RRAVALGRRL ARSLGQQDDE
ENELELELEQ DLDDEPDVEL SGVMFSPLKS RARALAHGDP FQVSRAQDFQ VGVTVLEAQK
LVGVNINPYV AVQVGGQRRV TATQRGTSCP FYNEYFLFEF HDTRLRLQDL LLEITAFHSQ
TLPFMATRIG TFRMDLGIIL DQPDGQFYQR WVPLHDPRDT RAGTKGFIKV TLSVRARGDL
PPPMLPPAPG HCSDIEKNLL LPRGVPAERP WARLRVRLYR AEGLPALRLG LLGSLVRALH
DQRVLVEPYV RVSFLGQEGE TSVSAEAAAP EWNEQLSFVE LFPPLTRSLR LQLRDDAPLV
DAALATHVPD LRRISHPGRA AGFNPTFGPA WVPLYGSPPG AGLRDSLQGL NEGVGQGIWF
RGRLLLAVSM QVLEGRAEPE PPQAQQGSTL SRLTRKKKKK ARRDQTPKAV PQHLDASPGA
EGPEIPRAME VEVEELLPLP ENVLAPCEDF LLFGVLFEAT MIDPTVASQP ISFEISIGRA
GRLEEQLGRG SRAGEGTEGA AVEAQPLLGA RPEEEKEEEE LGTHAQRPEP MDGSGPYFCL
PLCHCKPCMH VWSCWEDHTW RLQSSNCVRK VAERLDQGLQ EVERLQRKPG PGACAQLKQA
LEVLVAGSRQ FCHGAERRTM TRPNALDRCR GKLLVHSLNL LAKQGLRLLR GLRRRNVQKK
VALAKKLLAK LRFLAEEPQP PLPDVLVWML SGQRRVAWAR IPAQDVLFSV VEEERGRDCG
KIQSLMLTAP GAAPGEVCAK LELFLRLGLG KQAKACTSEL PPDLLPEPSA GLPSSLHRDD
FSYFQLRAHL YQARGVLAAD DSGLSDPFAR VLISTQCQTT RVLEQTLSPL WDELLVFEQL
IVDGRREHLQ EEPPLVIINV FDHNKFGPPV FLGRALAAPR VKLMEDPYQR PELQFFPLRK
GPWAAGELIA AFQLIELDYS GRLEPSVPSD VEPQDLAPLV EPHSGRLSLP PNVCPVLREF
RVEVLFWGLR GLGRVHLLEV EQPQVVLEVA GQRVESEVLA SYRESPNFTE LVRHLTVDLP
EQPYLQPPLS ILVIERRAFG HTVLVGSHIV PHMLRFTFRG HEDPPEEEGE MEETGDMMPK
GPQGQKSLDP FLAEAGISRQ LLKPPLKKLP LGGLLNQGPG LEEDIPDPEE LDWGSKYYAS
LQELQGQHNF DEDEMDDPGD SDGVNLISML GEIQDQGEAE VKGTVSPKKA VATLKIYNRS
LEEEFNHFED WLNVFPLYRG QGGQDGGGEE EGSGHLVGKF KGSFLIYPES EAVLFSEPQI
SRGIPQNRPI KLLVRVYVVK ATNLAPADPN GKADPYVVVS AGRERQDTKE RYIPKQLNPI
FGEILELSIS LPAETELTVA VFDHDLVGSD DLIGETHIDL ENRFYSHHRA NCGLASQYEV
DGYNAWRDAF WPSQILAGLC QRCGLPAPEY RAGAVKVGSK VFLTPPETLP PGISPFLSSP
TVASGDPEEA QALLVLRRWQ EMPGFGIQLV PEHVETRPLY HPHSPGLLQG SLHMWIDIFP
QDVPAPPPVD IKPRQPISYE LRVVIWNTED VVLDDENPLT GEMSSDIYVK SWVKGLEHDK
QETDVHFNSL TGEGNFNWRF VFRFDYLPTE REVSVWRRSG PFALEEAEFR QPAVLVLQVW
DYDRISANDF LGSLELQLPD MVRGARGPEL CSVQLARNGA GPRCNLFRCR RLRGWWPVVK
LKEAEDVERE AQEAQAGKKK RKQRRRKGRP EDLEFTDMGG NVYILT
GKVEAEFELL TVEEAEKRPV GKGRKQPEPL EKP SRPKTS FNWFVNPLKT FVFFIWRRYW
RTLVLL LLV LLTVFLLLVF YTIPGQISQV IFRPLHK
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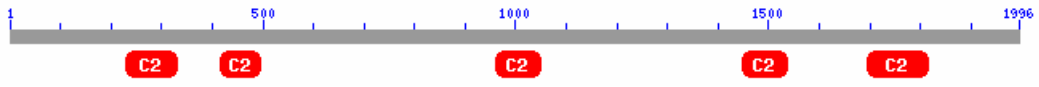
Result of BLAST Conserved Domain search on human Fer1L4 draft sequence above (five C2 domains are predicted):



the draft Fer1L4 sequence is an almost identical match to various predicted isoforms of hCG2039456 (Celera Genomics, accession number EAW76197)