

IFITM5

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                20          40          60          80          100
Platypus : MIVYVPRP HCPMEPRP PAP-APV VNGTVEVLRK MVVW I NTLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 114
Cow : MIVYVPRP PRAPPPRACDGNHAP T GARRPPD LLLWV I STLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 115
GuineaPig : MIVYVPRP PRLTFRGADGAAPIAAG GARRSPD LLLWV I STLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 116
Horse : MIVYVPRP PRA-PRPADGAAPIAAG GARRSPD LLLWV I STLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 113
Chicken : MIVYVPRP YLPMPTSHRDSSTP T-----ATSPD LLLWV I NTLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 109
Human : MIVYVPRP TRAPTPSAG--AHAA T GARRHPPD LLLWV I STLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Macaque : MIVYVPRP PRAPTPSAR--AHAA T GARRHPPD LLLWV I STLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 113
Mouse : MIVYVPRP PRAPTPSARADAARHAA SGTGPTD LLLWV I STLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 115
Chimpanzee : MIVYVPRP PRAPTPSAG--AHAA T GARRHPPD LLLWV I STLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Rat : MIVYVPRP PRAPTPSARADAARHAA SGTGPTD LLLWV I STLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 115
Frog : MIVYVPRP RILKGRKDS-PSVVT GAAAPID LLLWV I NTLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 114
Anolelizar : MIVYVPRP YLPMPTSHR QEP-SH VLR R-SPVVT LLYVW I NTLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 113
Elephant : MIVYVPRP PRALAPR AEGATHAAT T EARRPQD LLLWV I STLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 115
Opossum : MIVYVPRP EPLMTERGPEPGA VDPG-SPRPPD LLLWV I NTLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Sticklebac : MIVYVPRP STLTNCKSARKPAGS VVNDANNPPR LLYVW I NTLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 114
Tetraodon : MIVYVPRP YLPMPTSHRDSSTP V-----TSAPD LLLWV I NTLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 111
Turkey : MIVYVPRP YLPMPTSHRDSSTP V-----TSAPD LLLWV I NTLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 111
Zebrafinch : MIVYVPRP PRSPKRWPPP-----AAPT D LLLWV I NTLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 108
Zebrafish : MIVYVPRP PRAPTPSAG--AHAA T GARRHPPD LLLWV I STLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
orangutan : MIVYVPRP PRAPTPSAG--AHAA T GARRHPPD LLLWV I STLYINCCGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 113
Mdt 5Prod          k          t          pDh6w6a6f T6Y6N cClGf6AL s6kARD k g1 aA          s4A cYN LA w 6 P661 16vtg 6HL
    
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                120
Platypus : QCCMSYVYVSRDEAYD : 132
Cow : RQAAPESTKDEAYD : 133
GuineaPig : RQAAPESTKDEAYD : 133
Horse : RQAAPESTKDEAYD : 131
Chicken : QDVGFSQSGSDE : 127
Human : RQAAPESTKDEAYD : 131
Macaque : RQAAPESTKDEAYD : 131
Mouse : RQAAPESTKDEAYD : 133
Chimpanzee : RQAAPESTKDEAYD : 131
Rat : RQAAPESTKDEAYD : 133
Frog : VNGIIFPGLSSDDEK : 132
Anolelizar : QCEMELAFNPNEED : 131
Elephant : RQAAPESTKDEAYD : 133
Opossum : QCEMELAFNPNEED : 130
Sticklebac : QCEMELAFNPNEED : 131
Tetraodon : QDVGFSQSGSDE : 128
Turkey : QDVGFSQSGSDE : 128
Zebrafinch : QDVGFSQSGSDE : 118
Zebrafish : RQAAPESTKDEAYD : 131
orangutan : RQAAPESTKDEAYD : 131
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IFITM10

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                20          40          60          80          100
Anolelizar : -----MNSKSGDTRLP--VQCKHSPILIS VDTTEVNDLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 106
Chicken : -----MNSKSGDTRLP--VQCKHSPILIS VDTTEVNDLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 106
Cow : --NAPLTFMSSKTDVSRAGA QACKHLPTTIDVYD TT-VNDFLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Dog : --NAPLTFMSSKTDVSRAGA QACKHLPTTIDVYD TT-VNDFLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Frog : -----MWFPPCKHTLEREKKIPFGTASFYV D--DSEPT-VNDFLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 105
Froglike1 : -----MKTMKSSGSPFCPAYDQCTIVV D--SEEPQRLHWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 105
Froglike2 : -----MNSSYGQCNAGSPPLYGSPGYEPLQSTIL DSDGPPVRLHWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Froglike3 : -----MNSSYGQCNAGSPPLYGSPGYEPLQSTIL DSDGPPVRLHWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Froglike4 : MTFMFMSSKTDVSRAGA QACKHLPTTIDVYD TT-VNDFLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Fugulike1 : MTFMFMSSKTDVSRAGA QACKHLPTTIDVYD TT-VNDFLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Fugulike2 : --NMTMLMVPSEGGFRGPPGA-----YDSTVVD--AE--PPEHWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 104
Fugulike3 : --NMTMLMVPSEGGFRGPPGA-----YDSTVVD--AE--PPEHWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 105
Gorilla : --NAPLTFMSSKTDVSRAGA QACKHLPTTIDVYD TT-VNDFLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
GuineaPig : --NAPLTFMSSKTDVSRAGA QACKHLPTTIDVYD TT-VNDFLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Human : --NAPLTFMSSKTDVSRAGA QACKHLPTTIDVYD TT-VNDFLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Macaque : --NAPLTFMSSKTDVSRAGA QACKHLPTTIDVYD TT-VNDFLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Marmoset : --NAPLTFMSSKTDVSRAGA QACKHLPTTIDVYD TT-VNDFLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Medaka : --MSR-----RRCTEVPRQRLRSSG--ARGLPDLCAEPPKHLIWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 106
Medakalike : --MNSYFNSAQDIPNK-----QHVGLNIIQLTDEP-----HIFWCSFHEPDLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 102
Mouse : --NAPLTFMSSKTDVSRAGA QACKHLPTTIDVYD TT-VNDFLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 111
Opossum : --NAPLTFMSSKTDVSRAGA QACKHLPTTIDVYD TT-VNDFLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 105
Crangutan : --NAPLTFMSSKTDVSRAGA QACKHLPTTIDVYD TT-VNDFLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Rat : --NAPLTFMSSKTDVSRAGA QACKHLPTTIDVYD TT-VNDFLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 112
Turkey : -----MNSKSGDTRLP--VQCKHSPILIS VDTTEVNDLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 106
Zebra_finc : -----MNSKSGDTRLP--VQCKHSPILIS VDTTEVNDLWSFNFN VVDFCGLGFLAALV SIKR QKVVDLEAARHGGRKAKYIN LAAMGLP PLLLLLAVVTCGLHRSK : 106
Zebrafish : --N--SYPL-----RGNMCDERTGCVVSMACRLEDDHFTETNRHCPDCCGCPFNYSVRAEDREILICG YASSTYGTGTRRNAGVHCVLVCGLIILHIA : 101
                p          t 6          p          D 658          f Y N          CLG A1          S6K RD44          D ga          a tar          NI          6          66          6
    
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                120
Anolelizar : YPITDY : 112
Chicken : YPITDY : 112
Cow : YPITDY : 118
Dog : YPITDY : 118
Frog : SRFAHY : 115
Froglike1 : VQFAI : 111
Froglike2 : YFNNPW : 118
Froglike3 : YFNNPW : 119
Froglike4 : VQCTE : 118
Fugulike1 : VVVGIT : 118
Fugulike2 : VFNKHI : 110
Fugulike3 : RQCTE : 111
Gorilla : YPITDY : 118
GuineaPig : YPITDY : 118
Human : YPITDY : 118
Macaque : YPITDY : 118
Marmoset : YPITDY : 117
Medaka : VITQI : 112
Medakalike : SRFS : 107
Mouse : YPITDY : 116
Opossum : YPITDY : 115
Crangutan : YPITDY : 118
Rat : YPITDY : 118
Turkey : YPITDY : 112
Zebra_finc : YPITDY : 112
Zebrafish : NCLRE : 107
    
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120
BtaIFITM1 : VCGTLDV VLVVVSMEVQAVS : 134
BtaIFITM2 : VCGFDGGSVILIFVMAAYE : 112
BtaIFITM3 : VCGTLDV VLVVVSMEVQAVS : 134
BtaIFITM4 : VCGTLDV VLVVVSMEVQAVS : 134
BtaIFITM5 : VCGTLDV VLVVVSMEVQAVS : 134
BtaIFITM6 : VCGTLDV VLVVVSMEVQAVL : 134
CfaIFITM2 : VCGTLDV ISVILGAYLQAMG : 111
CfaIFITM3 : VCGFIIIMLIRLIFQGIS : 113
CfaIFITM4 : VCGISILGAYYGAALQVMG : 113
CfaIFITM5 : VCGTLDV ISVILGAYLQVMG : 113
CfaIFITM6 : VCGISILGAYYGAALQVMG : 134
Cjal1 : VCGTLDV LDIIPDLQAYG : 133
Cjal10 : VCGTLDV LDIIPDLQAYG : 131
Cjal11 : VCGTLDV LDIIPDLQAYG : 128
Cjal14 : VCGTLDV LDIIPDLQAYG : 132
Cjal15 : VCGTLDV LDIIPDLQAYG : 132
Cjal16 : VCGTLDV LDIIPDLQAYH : 133
Cjal17 : VCGTLDV LDIIPDLQAYG : 133
Cjal18 : VCGTLDV LDIIPDLQAYG : 133
Cjal19 : VCGTLDV LDIIPDLQAYG : 133
Cjal20 : VCGTLDV LDIIPDLQAYG : 133
Cjal21 : VCGTLDV LDIIPDLQAYG : 133
Cjal23 : VCGTLDV LDIIPDLQAYG : 133
Cjal24 : VCGTLDV LDIIPDLQAYG : 133
Cjal25 : VCGTLDV LDIIPDLQAYG : 133
Cjal26 : VCGTLDV LDIIPDLQAYG : 132
Cjal27 : VCGTLDV LDIIPDLQAYG : 128
Cjal28 : VCGTLDV LDIIPDLQAYG : 130
Cjal29 : VCGTLDV LDIIPDLQAYG : 132
Cjal3 : VCGTLDV LDIIPDLQAYG : 133
Cjal30 : VCGTLDV LDIIPDLQAYG : 132
Cjal4 : VCGTLDV LDIIPDLQAYG : 133
Cjal5 : VCGTLDV LDIIPDLQAYG : 131
Cjal6 : VCGTLDV LDIIPDLQAYG : 131
Cjal7 : VCGTLDV LDIIPDLQAYG : 133
Cjal8 : VCGTLDV LDIIPDLQAYG : 133
Cjal9 : VCGTLDV LDIIPDLQAYG : 133
CpoIFITM1 : VCSHVVLSHIFV---FQLFT : 129
CpoIFITM2 : VCSHVVLSHIFV---FTVQLFT : 133
CpoIFITM3 : VCSHVVLSHIFV---ATRNLY : 113
EcaIFITM1 : VCGTLDV LDIIPDLQAYG : 112
EcaIFITM2 : VCGTLDV LDIIPDLQAYG : 113
EcaIFITM3 : VCGTLDV LDIIPDLQAYG : 134
EcaIFITM4 : VCGTLDV LDIIPDLQAYG : 134
GgoIFITM1 : VCGTLDV LDIIPDLQAYG : 113
GgoIFITM2 : VCGTLDV LDIIPDLQAYG : 132
GgoIFITM3 : VCGTLDV LDIIPDLQAYG : 133
GgoIFITMac : VCGTLDV LDIIPDLQAYG : 123
GgoIFITM1 : VCGTLDV LDIIPDLQAYG : 132
GgoIFITM2 : VCGTLDV LDIIPDLQAYG : 115
GgoIFITM3 : VCGTLDV LDIIPDLQAYG : 127
GgoIFITM4 : VCGTLDV LDIIPDLQAYG : 134
HsaIFITM1 : VCGTLDV LDIIPDLQAYG : 113
HsaIFITM2 : VCGTLDV LDIIPDLQAYG : 132
HsaIFITM3 : VCGTLDV LDIIPDLQAYG : 133
HsaIFITMac : VCGTLDV LDIIPDLQAYG : 124
PtrIFITMac : VCGTLDV LDIIPDLQAYG : 133
HsaIFITM1 : VCGTLDV LDIIPDLQAYG : 127
HsaIFITM2 : VCGTLDV LDIIPDLQAYG : 133
HsaIFITM3 : VCGTLDV LDIIPDLQAYG : 133
HsaIFITM4 : VCGTLDV LDIIPDLQAYG : 107
HsaIFITM5 : VCGTLDV LDIIPDLQAYG : 133
LafIFITM1 : VCSHVVLSHIFV---ATRNLY : 134
LafIFITM2 : VCSHVVLSHIFV---ATRNLY : 134
LafIFITM3 : VCSHVVLSHIFV---ATRNLY : 134
LafIFITM4 : VCSHVVLSHIFV---ATRNLY : 113
MamIFITM1 : VCGTLDV LDIIPDLQAYG : 113
MamIFITM2 : VCGTLDV LDIIPDLQAYG : 133
MamIFITM3 : VCGTLDV LDIIPDLQAYG : 132
MamIFITM4 : VCGTLDV LDIIPDLQAYG : 133
MamIFITM5 : VCGTLDV LDIIPDLQAYG : 133
MamIFITM6 : VCGTLDV LDIIPDLQAYG : 133
MamIFITM7 : VCGTLDV LDIIPDLQAYG : 133
MamIFITM8 : VCGTLDV LDIIPDLQAYG : 131
MumIFITM1 : VCSHVVLSHIFV---ATRNLY : 106
MumIFITM2 : VCSHVVLSHIFV---ATRNLY : 133
MumIFITM3 : VCSHVVLSHIFV---ATRNLY : 134
MumIFITM6 : VCSHVVLSHIFV---ATRNLY : 104
MumIFITM7 : VCSHVVLSHIFV---ATRNLY : 137
MumIFITMac : VCSHVVLSHIFV---ATRNLY : 106
MumIFITM4 : VCSHVVLSHIFV---ATRNLY : 126
PabIFITM1 : VCGTLDV LDIIPDLQAYG : 132
PabIFITM2 : VCGTLDV LDIIPDLQAYG : 134
PabIFITM3 : VCGTLDV LDIIPDLQAYG : 133
PabIFITM4 : VCGTLDV LDIIPDLQAYG : 134
PabIFITM5 : VCGTLDV LDIIPDLQAYG : 132
PabIFITM6 : VCGTLDV LDIIPDLQAYG : 133
PabIFITM8 : VCGTLDV LDIIPDLQAYG : 129
PtrIFITM1 : VCGTLDV LDIIPDLQAYG : 113
PtrIFITM2 : VCGTLDV LDIIPDLQAYG : 132
PtrIFITM3 : VCGTLDV LDIIPDLQAYG : 133
PtrIFITM2 : VCGTLDV LDIIPDLQAYG : 133
PtrIFITM3 : VCGTLDV LDIIPDLQAYG : 127
RabbitIFIT : VCGTLDV LDIIPDLQAYG : 133
RnoIFITM1 : VCSHVVLSHIFV---ATRNLY : 107
RnoIFITM3 : VCSHVVLSHIFV---ATRNLY : 134
RnoIFITM6 : VCSHVVLSHIFV---ATRNLY : 104
RnoIFITM7 : VCSHVVLSHIFV---ATRNLY : 134
RnoIFITM1 : VCSHVVLSHIFV---ATRNLY : 132
RnoIFITM2 : VCSHVVLSHIFV---ATRNLY : 133
RnoIFITM3 : VCSHVVLSHIFV---ATRNLY : 113
RnoIFITM3 : VCSHVVLSHIFV---ATRNLY : 129
TbeIFITM1 : VCGTLDV LDIIPDLQAYG : 134
TbeIFITM2 : VCGTLDV LDIIPDLQAYG : 132
TbeIFITM3 : VCGTLDV LDIIPDLQAYG : 129
TbeIFITM4 : VCGTLDV LDIIPDLQAYG : 134

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Figure S5. Proteins sequence alignments of IFITM5, IFITM10 and IR-IFITM genes. Consensus (identical) amino acids are shown in the bottom line (Similarity Groups: 1, DN; 2, EQ; 3, ST; 4, KR; 5, FYW; 6, LIVM). Black or gray shading indicates conservation and similarity, respectively.