

Mouse / human DYSF protein sequence alignment

Mouse DYSF sequence accession number: NM_021469
Human DYSF sequence accession number: NM_003494
The human sequence is colored by its domain structure.

Legend:

C2 domain

Possible C2 domain

Ferlin family conserved domain

Region with repeated DYSF domains of unknown function

Transmembrane domain

This alignment was done using NCBI BLAST.

Identities = 1918/2062 (93%)

Positives = 1984/2062 (96%)

Gaps = 16/2062 (0%)

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Mouse
21 SDPVASLIFRGVKKRTKVIKNSVNPVWNEGFEDLKGIPLDQSSELLVVVKDHETMGRNR 80
   SD S +F GVKKRTKVIKNSVNPVWNEGFEDLKGIPLDQ SEL VVVKDHETMGRNR
20 SDAYCSAVFAGVKKRTKVIKNSVNPVWNEGFEDLKGIPLDQSELHVVKDHETMGRNR 79
Human

Mouse
81 FLGEAKIPLQEVLATPSLSASFNAPLLDAKQOPTGASLVLQVSYTPPPGAVPLFPPPASL 140
   FLGEAK+PL+EVLATPSLSASFNAPLLD K+QPTGASLVLQVSYTP PGAVPLFPPP L
80 FLGEAKVPLREVLATPSLSASFNAPLLDTKKQPTGASLVLQVSYTPLPGAVPLFPPPTPL 139
Human

Mouse
141 APSPTLPDMDLVPDGTGGEEDTEDQGLTGDEAEPFLDQSAAVGPGGPTTPRKPPSHPPHY 200
    PSPTLPD+D+V DTGGEEDTEDQGLTGDEAEPFLDQS PG PTTPRK PS PPPHY
140 EPSPTLPDLVVDVADTGTGGEEDTEDQGLTGDEAEPFLDQSGG--PGAPTTPRKLP SRPPHY 197
Human

Mouse
201 PGAKRKRSSAPPRKLLSDKPQDFQIRVQVIEGRQLPGVNIKPVVKVTAAGQTKRTRIQKG 260
    PG KRKRS+ RLLSDKPQDFQIRVQVIEGRQLPGVNIKPVVKVTAAGQTKRTRI KG
198 PGIKRKRSAPTSRLKLLSDKPQDFQIRVQVIEGRQLPGVNIKPVVKVTAAGQTKRTRIHKG 257
Human

Mouse
261 NSPLFNETLFFNVFDSPLELFDPEIFITVVDSSRLRTDALLGFEFRMDVGTVYREPRHAYL 320
    NSPLFNETLFFN+FDSP ELFDEPFIITVVDSSRLRTDALLGFEFRMDVGT+YREPRHAYL
258 NSPLFNETLFFNLFDSPELFDPEIFITVVDSSRLRTDALLGFEFRMDVGTIYREPRHAYL 317
Human

Mouse
321 RKWLLSDPDDFSAGARGYLKASLCVLGPGDEAPLDKKDPSEDKEDIEGNLLRPTGVALR 380
    RKWLLSDPDDFSAGARGYLK SLCVLGPGDEAPL++KDPSEDKEDIE NLLRPTGVALR
318 RKWLLSDPDDFSAGARGYLKTSLCVLGPGDEAPLERKDPSEDKEDIESNLLRPTGVALR 377
Human
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Mouse			
381	GAHFCLKLFRAEDLPQMDDAVMDNVKQIFGFDSNKKNLVDPFVEVSFAGKMLCSKILEKT	440	
	GAHFCLK+FRAEDLPQMDDAVMDNVKQIFGF+SNKKNLVDPFVEVSFAGKMLCSKILEKT		
378	GAHFCLKVFRAEDLPQMDDAVMDNVKQIFGFESNKKNLVDPFVEVSFAGKMLCSKILEKT	437	
Human			
Mouse			
441	ANPQWNQNITLPAFMFPMCEKMRIRVMDWDRDLTHNDIVATTYLGMSKISATGGEIE----	496	
	ANPQWNQNITLPAFMFPMCEKMRIR++DWRDLTHNDIVATTYLGMSKISATGGEIE		
438	ANPQWNQNITLPAFMFPMCEKMRIRIIDWRDLTHNDIVATTYLSMSKISAPGGEIEEIPA	497	
Human			
Mouse			
497	-----VDDNLGFLPTFGPCYVNLYGSPREFTGFDPYAEELNTGKGEVAYRGRVL	546	
	+DD LGFLPTFGPCY+NLYGSPREFTGFDPY ELNTGKGEVAYRGR+L		
498	GAVKPSKASDLDDYLGLPTFGPCYINLYGSPREFTGFDPYTELNTGKGEVAYRGRLL	557	
Human			
Mouse			
547	LSLETKLVEHSEQKVEDLPADDILRVEKYLRRRKYSLFAAFYSATMLQDVDDAIQFEVSI	606	
	LSLETKLVEHSEQKVEDLPADDILRVEKYLRRRKYSLFAAFYSATMLQDVDDAIQFEVSI		
558	LSLETKLVEHSEQKVEDLPADDILRVEKYLRRRKYSLFAAFYSATMLQDVDDAIQFEVSI	617	
Human			
Mouse			
607	GNYGKFDTTCLPLASTTQYSRAVFDGCHYYLPLWGNVKKPVVVLSSYWEDISHRIETQNQ	666	
	GNYGKFD TCLPLASTTQYSRAVFDGCHYYLPLWGNVKKPVVVLSSYWEDISHRIETQNQ		
618	GNYGKFDMTCLPLASTTQYSRAVFDGCHYYLPLWGNVKKPVVVLSSYWEDISHRIETQNQ	677	
Human			
Mouse			
667	LLGIADRLEAGLEQVHLALKAQCSTEDVDSLVAQLTDELIADCSQPLCDIHEIPSATHLD	726	
	LLGIADRLEAGLEQVHLALKAQCSTEDVDSLVAQLTDELIA CSQPL DIHE PSATHLD		
678	LLGIADRLEAGLEQVHLALKAQCSTEDVDSLVAQLTDELIAGCSQPLGDIHETPSATHLD	737	
Human			
Mouse			
727	QYLLRLRTRHLSQIKEAALALKLGHSELSTALEQAEDWLLHLRALAEEPQNSLPDIIWM	786	
	QYL +LRT HLSQI EAALALKLGHSEL ALEQAEDWLL LRALAEEPQNSLPDI+IWM		
738	QYLYQLRTHHLSQITEAALALKLGHSELPAALEQAEDWLLRLRALAEEPQNSLPDIVIWM	797	
Human			
Mouse			
787	LQGDKRVAYQRVPAHEVLFVSRGSPYCGRNCGKLQTIIFLKYPMEGMPGARMPVQIRIKLW	846	
	LQGDKRVAYQRVPAH+VLFVSRG +YCG+NCGKLQTIIFLKYPME +PGARMPVQIR+KLW		
798	LQGDKRVAYQRVPAHQVLFVSRGANVCGKNCGKLQTIIFLKYPMEKVPGARMPVQIRVKKLW	857	
Human			
Mouse			
847	FGLSVDEKEFNQFAEGKFSVFAETYENQTKLALVGNWGTGFSYPKFSQVDTGKIKLPKDS	906	
	FGLSVDEKEFNQFAEGK SVFAETYEN+TKLALVGNWGTG +YPKFSQVDTGKIKLPKDS		
858	FGLSVDEKEFNQFAEGKLSVFAETYENETKLALVGNWGTGLTYPKFSQVDTGKIKLPKDS	917	
Human			
Mouse			
907	FRPTAGWAWAGDWFVCEPKTLLHDAAGHLSFVEEVFENQTRLPGGQWIYMSDNYTDVNG	966	
	FRP+AGW WAGDWFVCEPKTLLHD AGHLSFVEEVFENQTRLPGGQWIYMSDNYTDVNG		
918	FRPSAGWTWAGDWFVCEPKTLLHDM DAGHLSFVEEVFENQTRLPGGQWIYMSDNYTDVNG	977	
Human			

Mouse			
967	EKVLPKDDIECPLGWKWEDEEWSTDLNRAVDEQGWEYSITIPPDRKPKHWVPVEKMYTH	1026	
	EKVLPKDDIECPLGWKWEDEEWSTDLNRAVDEQGWEYSITIPP+RKPKHWVP EKMYTH		
978	EKVLPKDDIECPLGWKWEDEEWSTDLNRAVDEQGWEYSITIPPERKPKHWVPAEKMYTH	1037	
Human			
Mouse			
1027	RRRRWVRLRRRDLSQMEALKRHRQAEAEEGEGWEYASLFGWKFHLEYRKTDAFRRRRWRRR	1086	
	RRRRWVRLRRRDLSQMEALKRHRQAEAEEGEGWEYASLFGWKFHLEYRKTDAFRRRRWRRR		
1038	RRRRWVRLRRRDLSQMEALKRHRQAEAEEGEGWEYASLFGWKFHLEYRKTDAFRRRRWRRR	1097	
Human			
Mouse			
1087	MEPLEKTGPAAVFALEGALGGMVDDKSEDSMSVSTLSFGVNRPTISCIFDYGNRYHLRCY	1146	
	MEPLEKTGPAAVFALEGALGGMVDDKSEDSMSVSTLSFGVNRPTISCIFDYGNRYHLRCY		
1098	MEPLEKTGPAAVFALEGALGGMVDDKSEDSMSVSTLSFGVNRPTISCIFDYGNRYHLRCY	1157	
Human			
Mouse			
1147	LYQARDLAAMDKDSFSDPYAIVSFLHQSQKTVEKNTLNPTWDQTLIFYEIEIFGEPASI	1206	
	+YQARDLAAMDKDSFSDPYAIVSFLHQSQKTVV KNTLNPTWDQTLIFYEIEIFGEPAA+		
1158	MYQARDLAAMDKDSFSDPYAIVSFLHQSQKTVVVKNNTLNPTWDQTLIFYEIEIFGEPATV	1217	
Human			
Mouse			
1207	AEHPPCIVVELYDHDITYGADEFMGRICQPSLERMPRLAWFPLTRGSQPAGELLAFAFELI	1266	
	AE PP IVVELYDHDITYGADEFMGRICQPSLERMPRLAWFPLTRGSQP+GELLA+FELI		
1218	AEQPPSIVVELYDHDITYGADEFMGRICQPSLERMPRLAWFPLTRGSQPSGELLASFELI	1277	
Human			
Mouse			
1267	QREKPAIHHIPGFEMHETSRIIDETEDTDLPYPPPQREANIYMVPQNIKPALQRTAIEIL	1326	
	QREKPAIHHIPGFE+ ETSRIIDE+EDTDLPYPPPQREANIYMVPQNIKPALQRTAIEIL		
1278	QREKPAIHHIPGFQVQETSRIIDSEDTDLPYPPPQREANIYMVPQNIKPALQRTAIEIL	1337	
Human			
Mouse			
1327	AWGLRNMKSYQMASISSPSLVVECGGQTVQSCVIRNLRKNPNFDVCTLFMEVMLPREDLY	1386	
	AWGLRNMKSYQ+A+ISSPSLVVECGGQTVQSCVIRNLRKNPNFD+CTLFMEVMLPRE+LY		
1338	AWGLRNMKSYQLANISSPSLVVECGGQTVQSCVIRNLRKNPNFDICTLFMEVMLPREELY	1397	
Human			
Mouse			
1387	CPPIVVKVIDNRQFGRRPVVGQCTIRSLENFLCDPYSAESPSPQGGPDDVSLSPGEDVL	1446	
	CPPI VKVIDNRQFGRRPVVGQCTIRSLE+FLCDPYSAESPSPQGGPDDVSLSPGEDVL		
1398	CPPITVKVIDNRQFGRRPVVGQCTIRSLESFLCDPYSAESPSPQGGPDDVSLSPGEDVL	1457	
Human			
Mouse			
1447	IDIDDKEPLIPVQEEEFIDWWSKFFASVGEREKCSYLEKDFDTLKVYDTQLENVEAFGG	1506	
	IDIDDKEPLIP+QEEEFIDWWSKFFAS+GEREKCSYLEKDFDTLKVYDTQLENVEAF G		
1458	IDIDDKEPLIPIQEEEFIDWWSKFFASIGEREKCSYLEKDFDTLKVYDTQLENVEAFEG	1517	
Human			
Mouse			
1507	LSDFCNTFKLYRGRTQEETDDPSVIGEFKGLFKIYPLPEDPAIPMPPRQFHQLAAQGPQE	1566	
	LSDFCNTFKLYRG+TQEET+DPSVIGEFKGLFKIYPLPEDPAIPMPPRQFHQLAAQGPQE		
1518	LSDFCNTFKLYRGKTQEETEDPSVIGEFKGLFKIYPLPEDPAIPMPPRQFHQLAAQGPQE	1577	
Human			

Mouse			
1567	CLVRIYIVRAFGLQPKDPNGKCDPYIKISIGKKSVDQDNYIPCTLEPVFGKMFELTCTL	1626	
	CLVRIYIVRAFGLQPKDPNGKCDPYIKISIGKKSVDQDNYIPCTLEPVFGKMFELTCTL		
1578	CLVRIYIVRAFGLQPKDPNGKCDPYIKISIGKKSVDQDNYIPCTLEPVFGKMFELTCTL	1637	
Human			
Mouse			
1627	PLEKDLKITLYDYDLLSKDEKIGETVIDLENRLLSKFGARCGLPQTCCVSGPNKWRDKLR	1686	
	PLEKDLKITLYDYDLLSKDEKIGETV+DLENRLLSKFGARCGLPQT CVSGPN+WRD+LR		
1638	PLEKDLKITLYDYDLLSKDEKIGETVVDLENRLLSKFGARCGLPQTYCVSGPNQWRDQLR	1697	
Human			
Mouse			
1687	PSQLLHLFCQQHRIKAPVYRTDRVTFQDKDYTIEEIEAGRPNPHLGPVEERLALHVLQQ	1746	
	PSQLLHLFCQQHR+KAPVYRTDRV FQDK+Y+IEEIEAGR+PNPHLGPVEERLALHVLQQ		
1698	PSQLLHLFCQQHRVKAPVYRTDRVMFQDKEYSIEEIEAGRIPNPHLGPVEERLALHVLQQ	1757	
Human			
Mouse			
1747	QGLVPEHVESRPLYSPLQPDIEQGKQLQMWIDIFPKVLGQPGPPFNITPRKARRFFLRCII	1806	
	QGLVPEHVESRPLYSPLQPDIEQGKQLQMW+D+FPK LG+PGPPFNITPR+ARRFFLRCII		
1758	QGLVPEHVESRPLYSPLQPDIEQGKQLQMWVDFPKALGRPGPPFNITPRRARRFFLRCII	1817	
Human			
Mouse			
1807	WNTKDVILDDLSTGEKMSDIYVKGWVMGFEEHKQKTDVHYRSLGGEGNFNWRFVFPFDY	1866	
	WNT+DVILDDLSTGEKMSDIYVKGWVM+GFEEHKQKTDVHYRSLGGEGNFNWRF+FPFDY		
1818	WNTRDVI LDDLSTGEKMSDIYVKGWMI GFEEHKQKTDVHYRSLGGEGNFNWRFIFFPDY	1877	
Human			
Mouse			
1867	LPAEQVCAVAKKDAFWRLDKTESKIPARVVVFQIWDNDKFSFDDFLGSLQLDLNRMPKPAK	1926	
	LPAEQVC +AKKDAFWRLDKTESKIPARVVVFQIWDNDKFSFDDFLGSLQLDLNRMPKPAK		
1878	LPAEQVCTI AKKDAFWRLDKTESKIPARVVVFQIWDNDKFSFDDFLGSLQLDLNRMPKPAK	1937	
Human			
Mouse			
1927	TAEKCSLDQLDDTFHPEWVSVLFEQKTVKGWPCVTEEGEKMLAGKLEMTLEIVAASEH	1986	
	TA+KCSLDQLDD FHPEWVSVLFEQKTVKGWPCV EEGEKK+LAGKLEMTLEIVAASEH		
1938	TAKKCSLDQLDDAFHPEWVSVLFEQKTVKGWPCVAEEGEKKILAGKLEMTLEIVAASEH	1997	
Human			
Mouse			
1987	EERPAGQGRDEPNMNPKLEDPRRPDTSFLWFTSPYKTMKFIWRRFRCAIILFIILFILL	2046	
	EERPAGQGRDEPNMNPKLEDPRRPDTSFLWFTSPYKTMKFIWRRFR AIILFIILFILL		
1998	EERPAGQGRDEPNMNPKLEDPRRPDTSFLWFTSPYKTMKFIWRRFRWAIILFIILFILL	2057	
Human			
Mouse			
2047	LFLGVFVYAFPNYAAMKLVKPF	2068	
	LFL +F+YAFPNYAAMKLVKPF		
2058	LFLAIFIYAFPNYAAMKLVKPF	2079	
Human			