

Supplemental figure legends

Supplemental Figure 1

Alignment of the predicted amino acid sequence of zebrafish FAN with those of human and mouse. Sequence comparison between mouse and zebrafish FAN revealed a total homology of 70% and a consensus homology of 78.5%.

Supplemental Figure 2

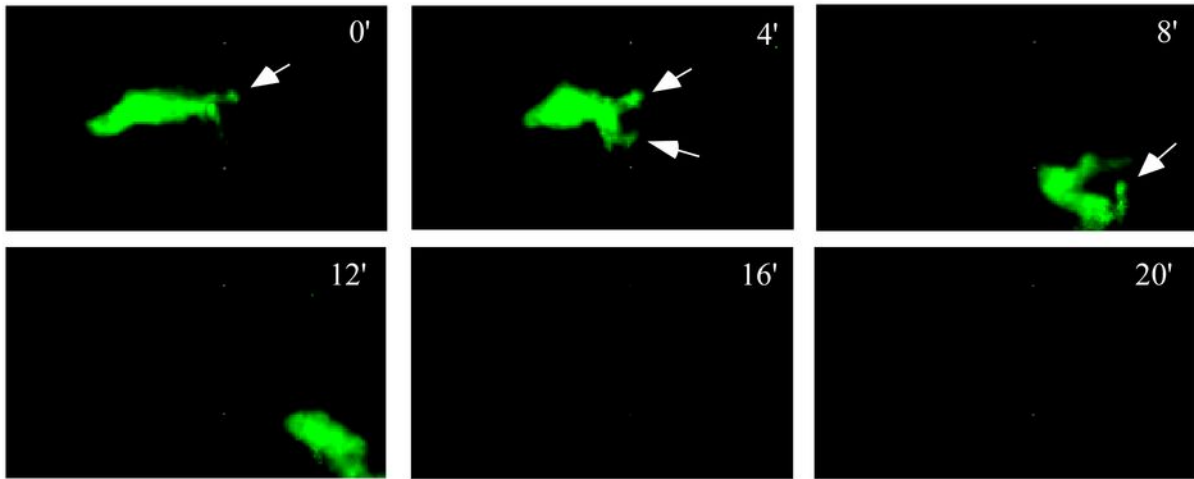
A) Time series of a wild-type leukocyte. The leukocyte starts moving directly toward the wound and extends protrusion only in the direction of motility. B) Time series of morphant leukocytes. The leukocytes extend protrusions in all direction and retract them again without moving. Even 47.30 minutes after injury the leukocytes have not started to move toward the tail fin wound

Video 1: Leukocyte migration in wt zebrafish embryos: Leukocyte migration toward a laser wound in the tail fin of wt zebrafish embryos.

Video 2: Leukocyte migration in FAN-MO zebrafish embryos: Leukocyte migration toward a laser wound in the tail fin of FAN-MO zebrafish embryos

	(1)	10	20	30	40	52
FAN Danio rerio	(1)	MAFIRKQREQLQLYSKERFSL	LLLDLEEYVFEQHIAYNTNRG	PETNRRT		
FAN mouse	(1)	MAFTRKQREQLQLYSKERFSL	LLLDLEEYVFEQHIAYNTNRG	PETNRRT		
FAN human	(1)	MAFIRKQREQLQLYSKERFSL	LLLDLEEYVFEQHIAYNTNRG	PETNRRT		
Consensus	(1)	MAFIRKQREQLQLYSKERFSL	LLLDLEEYVFEQHIAYNTNRG	PETNRRT		
	Section 2					
	(53)	53	60	70	80	104
FAN Danio rerio	(46)	NGSLKICSKSVIFEPD	DAVKPILKIPLRDCSEI	NAVEET-AHNPF	FIESKFA	C
FAN mouse	(53)	RGSLKICSKSVIFEPD	ALSOPIKIPLRDCIKIKGHG	ENGANRHF	AKAKSUG	
FAN human	(53)	RGSLKICSKSVIFEPD	ALSOPIKIPLRDCIKIKGHG	ENGANRHF	TKAKSGG	
Consensus	(53)	RGSLKICSKSVIFEPD	ALSOPIKIPLRDCIKIKGHG	ENGANKHF	KA	KASAG
	Section 3					
	(105)	105	110	120	130	140
FAN Danio rerio	(97)	IVIKTKQIYQIKENNV	VAPYKIDRGEKKITF	QLGSEIKTEDV	VQILLQLHRA	
FAN mouse	(105)	ISLIFSQIYFIKEHNV	VAPYKIRGKMEYV	FELVSGKVEDV	VETLLQLHRA	
FAN human	(105)	ISLIFSQIYFIKEHNV	VAPYKIRGKMEYV	FELVSGKVEDV	VETLLQLHRA	
Consensus	(105)	ISLIFSQIYFIKEHNV	VAPYKIRGKMEYV	FELVSGKVEDV	VETLLQLHRA	
	Section 4					
	(157)	157	170	180	190	208
FAN Danio rerio	(149)	SRLDKQSDQTAMIA	AIQSRLARTFDKNS	FQNVTELP	HMECAEMV	PLVLT
FAN mouse	(157)	SCLDKLGDQAMIT	AILOSRLARTFDKNR	FQNVSEKL	HMECAEMV	PLVLT
FAN human	(157)	SCLDKLGDQAMIT	AILOSRLARTFDKNR	FQNVSEKL	HMECAEMV	PLVLT
Consensus	(157)	SCLDKLGDQAMIT	AILOSRLARTFDKNR	FQNVSEKL	HMECAEMV	PLVLT
	Section 5					
	(209)	209	220	230	240	250
FAN Danio rerio	(201)	NAGHVCITDCNLY	FQPLNSYFDSV	VQITGLHSV	RRYKRRHGL	PLGLEVFCT
FAN mouse	(209)	NPGHVCITDCNLY	FQPLNGYKPV	VQITLQD	VRRYKRRHGL	PLGLEVFCT
FAN human	(209)	NPGHVCITDCNLY	FQPLNGYKPV	VQITLQD	VRRYKRRHGL	PLGLEVFCT
Consensus	(209)	NPGHVCITDCNLY	FQPLNGYKPV	VQITLQD	VRRYKRRHGL	PLGLEVFCT
	Section 6					
	(261)	261	270	280	290	300
FAN Danio rerio	(253)	EDDLCSDIYLFK	FYEPQDRDDLY	FYIATYLEH	HVAETAESY	MLQWRGNS
FAN mouse	(261)	EDDLCSDIYLFK	FYEPQDRDDLY	FYIATYLEH	HVAETAESY	MLQWRGNS
FAN human	(261)	EDDLCSDIYLFK	FYEPQDRDDLY	FYIATYLEH	HVAETAESY	MLQWRGNS
Consensus	(261)	EDDLCSDIYLFK	FYEPQDRDDLY	FYIATYLEH	HVAETAESY	MLQWRGNS
	Section 7					
	(313)	313	320	330	340	350
FAN Danio rerio	(305)	YOYLLHLNNLADR	SCNDLSQYVFP	FWIISDYSS	ELDLN	PATFRDLS
FAN mouse	(313)	YOYLLHLNNLADR	SCNDLSQYVFP	FWIISDYSS	ELDLN	PATFRDLS
FAN human	(313)	YOYLLHLNNLADR	SCNDLSQYVFP	FWIISDYSS	ELDLN	PATFRDLS
Consensus	(313)	YOYLLHLNNLADR	SCNDLSQYVFP	FWIISDYSS	ELDLN	PATFRDLS
	Section 8					
	(365)	365	370	380	390	400
FAN Danio rerio	(357)	ALNKERLERLLR	YQEMPEPRF	MYGSHYSS	PGYVLF	YLVRIAPEY
FAN mouse	(365)	ALNAERLERLLR	YQEMPEPRF	MYGSHYSS	PGYVLF	YLVRIAPEY
FAN human	(365)	ALNKERLERLLR	YQEMPEPRF	MYGSHYSS	PGYVLF	YLVRIAPEY
Consensus	(365)	ALNKERLERLLR	YQEMPEPRF	MYGSHYSS	PGYVLF	YLVRIAPEY
	Section 9					
	(417)	417	430	440	450	468
FAN Danio rerio	(409)	RFDNADRMFNSI	AETWKNCLD	GATDFKELI	PEFYGDD	VSLVNSL
FAN mouse	(417)	RFDNADRMFNSI	AETWKNCLD	GATDFKELI	PEFYGDD	VSLVNSL
FAN human	(417)	RFDNADRMFNSI	AETWKNCLD	GATDFKELI	PEFYGDD	VSLVNSL
Consensus	(417)	RFDNADRMFNSI	AETWKNCLD	GATDFKELI	PEFYGDD	VSLVNSL
	Section 10					
	(469)	469	480	490	500	510
FAN Danio rerio	(461)	QGGQVDDVLP	PWASPPDFL	QKMDALE	SNVSEHL	HEWIDLIF
FAN mouse	(469)	QGGQVDDVLP	PWASPPDFL	QKMDALE	SNVSEHL	HEWIDLIF
FAN human	(469)	QGGQVDDVLP	PWASPPDFL	QKMDALE	SNVSEHL	HEWIDLIF
Consensus	(469)	QGGQVDDVLP	PWASPPDFL	QKMDALE	SNVSEHL	HEWIDLIF
	Section 11					
	(521)	521	530	540	550	560
FAN Danio rerio	(513)	SEAVGAHNVF	HPLTYEGGVD	LNSIEDP	DEKVA	MLTQILEFG
FAN mouse	(521)	SEAVGAHNVF	HPLTYEGGVD	LNSIEDP	DEKVA	MLTQILEFG
FAN human	(521)	SEAVGAHNVF	HPLTYEGGVD	LNSIEDP	DEKVA	MLTQILEFG
Consensus	(521)	SEAVGAHNVF	HPLTYEGGVD	LNSIEDP	DEKVA	MLTQILEFG
	Section 12					
	(573)	573	580	590	600	610
FAN Danio rerio	(565)	PRRITPKFKSL	SQTSSYNAS	SPVSPG	EESFED	LTEESRT
FAN mouse	(573)	PRRITPKFKSL	SQTSSYNAS	SPVSPG	EESFED	LTEESRT
FAN human	(573)	PRRITPKFKSL	SQTSSYNAS	SPVSPG	EESFED	LTEESRT
Consensus	(573)	PRRITPKFKSL	SQTSSYNAS	SPVSPG	EESFED	LTEESRT
	Section 13					
	(625)	625	630	640	650	660
FAN Danio rerio	(616)	LQSKRIHKEAV	TGAVTL	SGDSFT	TSQD	STLKMFS
FAN mouse	(625)	LHEQYKIHKEAV	TGAVT	SGDSV	FTS	QDSTLKM
FAN human	(625)	LHEQYKIHKEAV	TGAVT	SGDSV	FTS	QDSTLKM
Consensus	(625)	LHEQYKIHKEAV	TGAVT	SGDSV	FTS	QDSTLKM
	Section 14					
	(677)	677	690	700	710	728
FAN Danio rerio	(667)	ALSSCLLLP	GGDTV	ISSW	NNVYF	YSIAFG
FAN mouse	(677)	ALSSCLLLP	GGDTV	ISSW	NNVYF	YSIAFG
FAN human	(674)	ALSSCLLLP	GGDTV	ISSW	NNVYF	YSIAFG
Consensus	(677)	ALSSCLLLP	GGDTV	ISSW	NNVYF	YSIAFG
	Section 15					
	(729)	729	740	750	760	770
FAN Danio rerio	(719)	RLYASW	STVKVW	SGVPA	EMPG	TKRHFD
FAN mouse	(729)	RLYASW	STVKVW	SGVPA	EMPG	TKRHFD
FAN human	(726)	RLYASW	STVKVW	SGVPA	EMPG	TKRHFD
Consensus	(729)	RLYASW	STVKVW	SGVPA	EMPG	TKRHFD
	Section 16					
	(781)	781	790	800	810	820
FAN Danio rerio	(771)	LAVGTKEG	TNIU	DLTATL	LHQIS	CHSGV
FAN mouse	(781)	LAVGTKEG	TNIU	DLTATL	LHQIS	CHSGV
FAN human	(778)	LAVGTKEG	TNIU	DLTATL	LHQIS	CHSGV
Consensus	(781)	LAVGTKEG	TNIU	DLTATL	LHQIS	CHSGV
	Section 17					
	(833)	833	840	850	860	870
FAN Danio rerio	(823)	NVIDVQT	GMLISS	SEEP	QRCF	VWDG
FAN mouse	(833)	NVIDVQT	GMLISS	SEEP	QRCF	VWDG
FAN human	(830)	NVIDVQT	GMLISS	SEEP	QRCF	VWDG
Consensus	(833)	NVIDVQT	GMLISS	SEEP	QRCF	VWDG
	Section 18					
	(885)	885	890	900	910	921
FAN Danio rerio	(875)	IQAHS	GAVT	CHM	NEQ	CSII
FAN mouse	(885)	IQAHS	GAVT	CHM	NEQ	CSII
FAN human	(882)	IQAHS	GAVT	CHM	NEQ	CSII
Consensus	(885)	IQAHS	GAVT	CHM	NEQ	CSII

A



B

