

Additional file 8

Figure S7 Sequence alignment of *mfsA*-DNA-LYT10 (top), *mfsA*-cDNA-LYT10 (middle), and *mfsA*-cDNA-NIH2624 (bottom)

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1                                     60
mfsA-DNA-LYT10      ATGAGCCACGGTGACACTGAGTCCCCAAACCCAGTGACATCCACGGAAGGTAGCGGGCAA
mfsA-cDNA-LYT10      ATGGGGCCACGGTGACACTGAGTCCCCAAACCCAGTGACATCCACGGAAGGTAGCGGGCAA
mfsA-cDNA-NIH2624    ATGGGGCCACGGTGACACTGAGTCCCCGAACCCACGACGACCACGGAAGGTAGCGGACAA
*** *****
61                                     120
mfsA-DNA-LYT10      TCTGAGCCAGAGAAAAGGGGCCCTGATATCCACTATGGAGAAAATGCGTCATTACGTTT
mfsA-cDNA-LYT10      TCTGAGCCAGAGAAAAGGGGCCCTGATATCCACTATGGAGAAAATGCGTCATTACGTTT
mfsA-cDNA-NIH2624    AACGAGCCAGAGAAAAGGGCCGCTGATATCCATTATGGAGAAAATGTGTCATTACGTTT
*****
121                                    180
mfsA-DNA-LYT10      GTTGTTAGTTGGATGACTCTAGTCGTTACTTTCTCCAGTACTTGCCTTCTTCTCGCGCC
mfsA-cDNA-LYT10      GTTGTTAGTTGGATGACTCTAGTCGTTACTTTCTCCAGTACTTGCCTTCTTCTCGCGCC
mfsA-cDNA-NIH2624    GTTGTTAGTTGGATGACTCTAGTCGTTACTTTCTCCAGTACTTGTCTTCTTCTCGCGCC
*****
181                                    240
mfsA-DNA-LYT10      CCTGAAATTGCGGGTGAATTTGATATGACTGTCGAGACTATCAATATCTCCAATGCTGGT
mfsA-cDNA-LYT10      CCTGAAATTGCGGGTGAATTTGATATGACTGTCGAGACTATCAATATCTCCAATGCTGGT
mfsA-cDNA-NIH2624    CCTGAAATCGCGAATGAATTTGATATGACTGTCGAGACTATCAACATCTCCAATGCTGGT
*****
241                                    300
mfsA-DNA-LYT10      GTCCTGATTGCCATGGGATATTCTTCCCTCATATGGGGTCCCATGAACAAGTTAATCGGC
mfsA-cDNA-LYT10      GTCCTGATTGCCATGGGATATTCTTCCCTCATATGGGGTCCCATGAACAAGTTAATCGGC
mfsA-cDNA-NIH2624    GTCCTAGTTGCCATGGGATATTCTTCCCTCATATGGGGTCCCATGAACAAGTTAGTCGGC
*****
301                                    360
mfsA-DNA-LYT10      AGGCGGACATCATACAATCTGGCCATTTCAATGCTTTGTGCGTGCTCCGCTGGAACGGCA
mfsA-cDNA-LYT10      AGGCGGACATCATACAATCTGGCCATTTCAATGCTTTGTGCGTGCTCCGCTGGAACGGCA
mfsA-cDNA-NIH2624    CGGCGGACATCATACAATCTGGCCATTTCAATGCTTTGTGCGTGCTCCGCTGGAACGGCA
*****
361                                    420
mfsA-DNA-LYT10      GCGGCGATAAACGAGGAAATGTTTCATAGCGTTCAGAGTGTTGAGCGGCTTAACCGGAACC
mfsA-cDNA-LYT10      GCGGCGATAAACGAGGAAATGTTTCATAGCGTTCAGAGTGTTGAGCGGCTTAACCGGAACC
mfsA-cDNA-NIH2624    GCGGCGATAAACGAGGAAATGTTTCATAGCGTTCAGAGTGTTGAGCGGCTTAACCGGAACC
*****
421                                    480
mfsA-DNA-LYT10      TCGTTCATGGTCTCAGGCCAAACTGTTCTTGCAGACATCTTTGAGCCTGTACGCATAACA
mfsA-cDNA-LYT10      TCGTTCATGGTCTCAGGCCAAACTGTTCTTGCAGACATCTTTGAGCCTGT-----
mfsA-cDNA-NIH2624    TCGTTCATGGTCTCAGGCCAAACTGTTCTTGCAGATATCTTTGAGCCTGT-----
*****
481                                    540
mfsA-DNA-LYT10      CGCCCTCGTCACCCTATTTTCGAAAATAATCTGTTGCTGTCAGGTTTACCGTGGGACG
mfsA-cDNA-LYT10      -----TTACCGTGGGACG
mfsA-cDNA-NIH2624    -----TTACCGTGGGACG
*****
541                                    600
mfsA-DNA-LYT10      GCCGTAGGTTTCTTCATGGCTGGGACTCTTTCTGGCCCTGCAATAGGTACATCCTCGGCG
mfsA-cDNA-LYT10      CCGGTAGGTTTCTTCATGGCTGGGACTCTTTCTGGCCCTGCAATAGG-----
mfsA-cDNA-NIH2624    GCCGTAGGTTTCTTCATGGCCGGGACTCTTTCTGGCCCTGCAATAGG-----
*****
601                                    660
mfsA-DNA-LYT10      GCAAGTACTAGAACTCCGAACAGGAATAATTGTTTGACCAGGCCCGTGGTGGGAGGGA
mfsA-cDNA-LYT10      -----CCCGTGGTGGGAGGGA
mfsA-cDNA-NIH2624    -----CCCGTGGTGGGAGGGA
*** *****
661                                    720
mfsA-DNA-LYT10      TCATCGTCACCTTTACGAGTTGGCGTGTTATCTTCTGGCTCCAAGTATGAGCGGGC
mfsA-cDNA-LYT10      TCATCGTCACCTTTACGAGTTGGCGTGTTATCTTCTGGCTCCAAGTATGAGCGGGC
mfsA-cDNA-NIH2624    TCATCGTCACCTTTACGAGTTGGCGTGTTATCTTCTGGCTCCAAGTATGAGCGGGC
*****
721                                    780
mfsA-DNA-LYT10      TGGGGCTAGTTCTTTCTTCTATTTTCCCGAAAAGTGAAGCACTTTCTGAGAAGGCGT
mfsA-cDNA-LYT10      TGGGGCTAGTTCTTTCTTCTATTTTCCCGAAAAGTGAAGCACCTTCTGAGAAGGCGT
mfsA-cDNA-NIH2624    TGGGGCTCGTGCTTTCTTCTATTTTCCCGAAAATGAAGGAAATTCTGAGAAGGTCT
*****
781                                    840
mfsA-DNA-LYT10      CAACCGCGTCCAAACCGACCACACTTGTCAATCATATCAAAATTCTCCCAACGGATG
mfsA-cDNA-LYT10      CAACCGCGTCCAAACCGACCACACTTGTCAATCATATCAAAATTCTCCCAACGGATG
mfsA-cDNA-NIH2624    CAACCGCGTTTAAACCGACCACACTTGTCAATCATATCGAAATTCTCCCAACGGATG
*** *****
841                                    900
mfsA-DNA-LYT10      TGCTCAAGCAGTGGGTCTATCCAAATATCTTTCTTGGCGTAAGTATCTGCGAGATATACC
mfsA-cDNA-LYT10      TGCTCAAGCAGTGGGTCTATCCAAATATCTTTCTTGGCG-----
mfsA-cDNA-NIH2624    TGCTCAAGCAGTGGGTGTATCCAAATGTCTTTCTTGGCG-----
*****

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	901	960
mfsA-DNA-LYT10	CTATGCATTTACTGGAAAACAAAATGCTCATGCCGCAAATCAAAGGACTTATGCTGTGGC	
mfsA-cDNA-LYT10	-----ACTTATGCTGTGGC	
mfsA-cDNA-NIH2624	-----ACTTATGCTGTGGC	

	961	1020
mfsA-DNA-LYT10	CTCCTGGCGATTACGCAATATTCGATCCTGACTTCAGCTCGGGCCGTATTCAACTCACGG	
mfsA-cDNA-LYT10	CTCCTGGCGATTACGCAATATTCGATCCTGACTTCAGCTCGGGCCGTATTCAACTCACGG	
mfsA-cDNA-NIH2624	CTCCTGGCAATCACGCAATATTCGATCCTGACTTCAGCTCGTGCCATATTCAACTCACGA	
	***** ** *****	
	1021	1080
mfsA-DNA-LYT10	TTTCATTTAACGACTGCCCTAGTATCGGGTCTCTTCTACCTCGCTCCAGGTGCCGGGTTC	
mfsA-cDNA-LYT10	TTTCATTTAACGACTGCCCTAGTATCGGGTCTCTTCTACCTCGCTCCAGGTGCCGGGTTC	
mfsA-cDNA-NIH2624	TTTCATTTAACGACTGCCCTAGTATCGGGTCTCTTCTACCTCGCTCCAGGTGCCGGGTTC	

	1081	1140
mfsA-DNA-LYT10	CTGATAGGCAGTCTCGTCGGCGGTAAGCTTTCGGATCGCACC GTTCGGAGCTACATAGTA	
mfsA-cDNA-LYT10	CTGATAGGCAGTCTCGTCGGCGGTAAGCTTTCGGATCGCACC GTTCGGAGCTACATAGTA	
mfsA-cDNA-NIH2624	CTGATAGGCAGTCTCGTCGGCGGTAAGCTTTCGGATCGCACC GTTCGGAGATACATAGTA	

	1141	1200
mfsA-DNA-LYT10	AAGCGCGGATTCCGTCTCCCTCAGGATCGACTCCACAGCGGGCTCATCACATTGTTTGGC	
mfsA-cDNA-LYT10	AAGCGCGGATTCCGTCTCCCTCAGGATCGACTCCACAGCGGGCTCATCACATTGTTTGGC	
mfsA-cDNA-NIH2624	AAGCGCGGATTCCGTCTCCCTCAGGATCGACTCCACAGCGGGCTCATCACATTGTTTGGC	

	1261	1320
mfsA-DNA-LYT10	GTAGTGCCCATAAATCGCGCGTTTTTTCGGGGCTGGGGGCTCATGGGCAGTTTTAACTGC	
mfsA-cDNA-LYT10	GTAGTGCCCATAAATCGCGCGTTTTTTCGGGGCTGGGGGCTCATGGGCAGTTTTAACTGC	
mfsA-cDNA-NIH2624	GTAGTGCCCATAAATCGCGCGTTTTTTCGGGGCTGGGGGCTCATGGGCAGTTTTAACTGC	

	1321	1380
mfsA-DNA-LYT10	CTGAACACTTATGTGGCTGGTACGTTCCACACGCTCATTATTTATATTCCCTTTGTGTA	
mfsA-cDNA-LYT10	CTGAACACTTATGTGGCTG-----	
mfsA-cDNA-NIH2624	CTGAACACTTACGTGGCTGGTTTGTCCACACCTCATT--TATCTATTCCCTTTGTGTA	

	1381	1440
mfsA-DNA-LYT10	CGTGCCCATAAATAATGTTGTCTCTAACCGCGAGTAGAAGCCTTGCCACAGAACCGGTCTG	
mfsA-cDNA-LYT10	-----AAGCCTTGCCACAGAACCGGTCTG	
mfsA-cDNA-NIH2624	CATGCCCAATAA-----	
	1441	1500
mfsA-DNA-LYT10	CAGTCATTGCAGGGAAGTATATGCTTCAATACTCCTTTTCTGCAGGAAGTAGTGCAGTCG	
mfsA-cDNA-LYT10	CAGTCATTGCAGGGAAGTATATGCTTCAATACTCCTTTTCTGCAGGAAGTAGTGCAGTCG	
mfsA-cDNA-NIH2624	-----	
	1501	1560
mfsA-DNA-LYT10	TTGATCTCGTGATAAACGCCCTCGGAGTTGGATGGACGTTACGCTATGTATGGTACTTT	
mfsA-cDNA-LYT10	TTGATCTCGTGATAAACGCCCTCGGAGTTGGATGGACGTTACGCTATG-----	
mfsA-cDNA-NIH2624	-----	
	1561	1620
mfsA-DNA-LYT10	TCTTCCCACCTCTCAATGTACATGCTCACAGTTCTTACAGGTGTGGTTGCTTCGACTATA	
mfsA-cDNA-LYT10	-----TGTGGTTGCTTCGACTATA	
mfsA-cDNA-NIH2624	-----	
	1621	1680
mfsA-DNA-LYT10	GCTGGATTGATCACGGCGGCCATCGCAAGGTGGGGGATAAATATGCAAAGATGGGCAGAA	
mfsA-cDNA-LYT10	GCTGGATTGATCACGGCGGCCATCGCAAGGTGGGGGATAAATATGCAAAGATGGGCAGAA	
mfsA-cDNA-NIH2624	-----	
	1681	1707
mfsA-DNA-LYT10	AAAGGCTTTCAATATGCCTACCCAATAG	
mfsA-cDNA-LYT10	AAAGGCTTTCAATATGCCTACCCAATAG	
mfsA-cDNA-NIH2624	-----	