

Hydrophobic anchor

FaF3'H --MFLIAVITLLVALVLFRLFESGKSQRRSLPLPPGPKFWEVVGNNPLHLGVFPHHS LADL
Mdf3'H ---MEVLIVFTVVFAFFLYFIFAPGGSRH.....PV.....A.
VvF3'H ----MNPALIFCTALFCVLLYHFLTRR.VR...L...I.....PV...I.A.
AtF3'H MATLFLTILLATVLFLLIRIFSHRRNRSHNRR.....N...II.....M.TK...RTLSAM

SRS1

FaF3'H ARKHGPLMHLRLGYDVVVAASVASQFLKTHDANFSRPPNSGAKYMAINYQDLVFRP
Mdf3'H ..QY.....F.....HL.....A.
VvF3'H .KTY.....M.F.....N.....HI.....A.
AtF3'H VTTY..IL....F.....K...E...I...A.....H.....A.

FaF3'H YGPRWRQFRKISSVHLFSGKALDDLKHVRQEEVAVLAHALANAGSKAVNLAQLLNLCTVN
Mdf3'HLL.....G...S.....P.....V....
VvF3'HML...C.....FR.I.....TR...R.QTP...G...V...T.
AtF3'H ..H...LL.....A...E.F.....GT.TRE.VRV.T.P...G...V.M.V..

FaF3'H ALGRVMVGRRVFGDGSDDPKADEFKSMVEMMVLAVGNIGDFIPCLEWLDLQGVVSK
Mdf3'HL..N.M.GE.....F.....S.....AG.
VvF3'HL.....GE.....E...L...F...V.A.....AA.
AtF3'H ...E.I...L...--ADA.H...R...T...A...F...V.S.D.....AG.

FaF3'H MKKLHKRFDDFLTAIVEDHKKSTG--TAAHVDMLTLLSLQ-EDADGEGAKLTDTEIKAL
Mdf3'HA.....E.R.R--GGK.....K.....
VvF3'HA...A.G...E...I.GSAGSER..L.S.I.VR-DN...G...V....
AtF3'H ..R.....A..SS.LKE.EMNGQ--DQK.T...S..I..KGT.L..D.GS.....

OBS (oxygen binding site)

FaF3'H LLNMF TAGTDTSSSTVEWALAEIKHPHMLARVQKELDDVVGQDRLVTESDLPNLTYLQA
Mdf3'HI...LR..KI..QL.Q...Q...R.....
VvF3'H ..L.....I...R..E.M.QA.Q...A..RS...DL...Q...V...
AtF3'HA...D..I...R..DIMVKA.E...I...R..P.N...IAQ.P....

FaF3'H VIKETFRLHPSTPLSLPRMAAESCEINGYHIPKGSTLLVNVWAI SRDPAEWAEPLFRPE
Mdf3'HT.....F.....A.....V...DQ.S.....
VvF3'H I.....NA.....A...EV.E...N
AtF3'H ..N...P.....HI.S.....T.I.A...DQ.SD..A.K..

Cytp450-motif (HBS; heme binding site)

FaF3'H RFLPGGEKPNVDIRGND FEVIPFGARRICAGMSLGLRMVSLMTATLVHAFDWTLD-VT
Mdf3'H ..MS.....G.....GL.
VvF3'HR..A.V.....H.L.....N.E.PEGQV
AtF3'HSG..VK.S...L.....L.....TIQFL.....QG...E..GG..

FaF3'H PEKLNMDAEFGLTLQRAAPLMMHPTRLAPHAYKTS--
Mdf3'HY.....V...N.....NA.SS
VvF3'H A.....Y.....V..LP..S.QVFGK---
AtF3'HE.SY.....V..VV..KP...NV.GLGSG

(Dots indicate common amino acid residues)

Supplemental Figure S1.

Supplemental Table S1. PCR primers used for homology-based RT-PCR or qRT-PCR experiments

Name		Sequence (5' to 3')
<i>Fa'F3'H</i>	upstream	GTNTTYAAYATHGGNGAYTT
<i>Fa'F3'H</i>	nested upstream	GCNGTNATHAARGARACNTT
<i>Fa'F3'H</i>	downstream	CCRTANACYTCRTCCATRTT
<i>Fa'CHS</i>	forward	GCAACACCACCCAACGTATG
<i>Fa'CHS</i>	reverse	ACACATGCGCTGGAATTTCTC
<i>Fa'F3'H</i>	forward	TGCTGGTACTGATACGTCATCGA
<i>Fa'F3'H</i>	reverse	GAGTCGGTCCCTGTCCAACAAC
<i>Fa'CHI</i>	forward	TTTCAATGGCTTTCGCTTCTG
<i>Fa'CHI</i>	reverse	GTGACAATGATACTACCGCTGACG
<i>Fa'DFR</i>	forward	GGGTGGTGTTTACATCTTCGG
<i>Fa'DFR</i>	reverse	CTGCTTGCTCGGCTAGATTT
<i>Fa'MYB1</i>	forward	CCAAATAAGCCCCATGAGAA
<i>Fa'MYB1</i>	reverse	TCAACTCAGGCACCAACAG
<i>Fa'MYB10</i>	forward	TTAATTGCCGGAAGATTGC
<i>Fa'MYB10</i>	reverse	GGTTCGTGGTTCGAGGTCTTA
<i>Fa'GAPDH</i>	forward	TCCATCACTGCCACCCAGAAGACTG
<i>Fa'GAPDH</i>	reverse	AGCAGGCAGAACCTTTCGACAG
<i>Fa'actin</i>	forward	CAACTGGGATGACATGGAGAAGA
<i>Fa'actin</i>	reverse	GGCCACATACATAGCAGGAG