Electronic supplem entary material

Below is the image is a link to a low resolution version

Supplementry figure 1

E

CLUSTAL FORMAT	for T-COFFEE Version_1.41, CPU=23.55 sec, SCORE=53, Nseq=4, Len=1515
DmOAZ	MMALKMLYRGPSSRLENLIEKIOATKEITNNDMYSTHTSSSYSPSISDGTMTPNSHHLIG
OAZ	medesiytcdhcqqdfesladltdhrahrcpgdgdddpqlswvasspsskdvasptqmig
EBFAZ	mig
ROAZ	mig
	:**
DmOAZ	APTAAGQEDHPTEGKINGGADGEDLPKPKRLPHFHHHHHHHHHHHQQALKIANKLRKINKE
OAZ	dgcdl
EBFAZ	dgcdl
ROAZ	dgcdl
	** **
DmOAZ	AKMGATAGGGATGAASKFDKLTGEGIKSRGDG-SYQCQFCEKTFPRLGYLKHHVQSHAEH
OAZ	glgeeeggtglpypcqfcdksfirlsylkrheqihsdk
EBFAZ	glgeeeggtglpypcqfcdksfirlsylkrheqihsdk
ROAZ	glgeeeggtglpypcqfcdksfirlsylkrheqihsdk
	* * :. * * .* ***:*:* **.**:* * *:::
DmOAZ	LPFKCEYCSKLFKHKRSRDRHKKLHTNERNYKCPHCEAAFSRSDHLKIHMKTHDIQKPFQ
OAZ	lpfkctycsrlfkhkrsrdrhiklhtgdkkyhcheceaafsrsdhlkihlkthssskpfk
EBFAZ	lpfkctfcsrlfkhkrsrdrhiklhtgdkkyhcheceaafsrsdhlkihlkthssskpfk
ROAZ	lpfkctfcsrlfkhkrsrdrhiklhtgdkkyhcheceaafsrrdhlkihlkthssskpfk
	**** :**:******* ****.:::*:* .****** *****:******:
DmOAZ	CSMCNRGYNTAAALTSHMQKHKKNAAILAAGGNPNAL
OAZ	ctvckrgfsstsslqshmqahkknkehlaksekeakkddfmcdycedtfsqteelekhvl
EBFAZ	csvckrgfsstsslqshmqahkknkehlaksekeakkddfmcdycedtfsqteelekhvl
ROAZ	csvckrgfsstsslqshmqahkknkehlaksekeakkddfmcdycedtfsqteelekhvl
	:::**:.:::: **** **** ** . :
DmOAZ	NYSPRSTGSAS
OAZ	trhpqlsekadlqcihcpevfvdentllahihqahanqkhkcpmcpeqfssvegvychld
EBFAZ	tlhpqlsekadlqcihcpevfvdestllahihqahanqkhkcpmcpeqfssvegvychld
ROAZ	tlhpqlsekadlqcihcpevfvdestllahihqahanqkhkcpmcpeqfssvegvychld
	. *::.*.
DmOAZ	ASVSSNGSLQKRRYALALASDSSPSRMDFP
OAZ	shrqpdssnhsvspdpvlgsvasmssatpdssasvergstp
PDPA 7	shuandaanharrandarri warramaastada

OAZ	shrqpdssnhsvspdpvlgsvasmssatpdssasvergstp
EBFAZ	shrqpdssnhsvspdpvlqsvasmssatpdssasvergstp
	shrqpdssnhsvspdpvlgsvasmssatpdstpdpvlgsvasmssatpdssasvergstp
ROAZ	
	***.: * . : :.**
DmOAZ	KRSRSNHVGGTTTTATPTPLIRCSYCPKVTEFSSLEQLNAHLQSVHEQPQTQGVKT
OAZ	dstlkplrgqkkmrddgqgwtkvvyscpycsk-rdfnslavleihlktihadkpqqshtc
EBFAZ	dstlkplrgqkkmrddgqswpkvvyscpycsk-rdftslavleihlktihadkpqqshtc
ROAZ	dstlkplrgqkkmrddgqswskvvyscpycsk-rdftslavleihlktihadkpqqshtc
	* *
DmOAZ	PVQEGEGFQLSCEYCTMKFGNIAGLFQHMRSTH
	qicldsmptlynlnehvrklhknhaypvmqfgnisafhcnycpemfadinslqehirvsh
OAZ	
EBFAZ	qicldsmptlynlnehvrklhkshaypvmqfgnisafhcnycpemfadinslqehirvsh
ROAZ	qicldsmptlynlnehvrklhkshaypvmqfgnisafhcnycpemfadinslqehirvsh
	: * *: : *:**. *.:* :* :*:
DmOAZ	MDRLSSPNSYYEHFNRLATAGTFSPRLALDLPKIKPDLGSPERE
OAZ	cgpnanpsdgnnaffcnqcsmgfltessltehiqqahcsvgsaklespvvqptqsfmevy
EBFAZ	cgpnanppdgnnaffcnqcsmgfltessltehiqqahcsvgstklespvvqptqsfmevy
ROAZ	cgpnanppdgnnaffcnqcsmgfltessltehiqqahcsvgstklespviqptqsfmevy
None	. :.* . : * ::: * *: * ::* . *
DmOAZ	SRPAEDDLPTDLSNNKRRPLTPNPQAQTPLA
OAZ	scpyctnspifgsilkltkhikenhkniplahskkskaeqspvssdvevsspkrqrlsas
EBFAZ	scpyctnspifgsilkltkhikenhkniplahskkskaeqspvssdvevsspkrqrlsgs
ROAZ	scpyctnspifgsilkltkhikenhkniplahskkskaeqspvssdvevsspkrqrlsgs
	* * : * * * *:*. **: . :: .:* :
DmOAZ	PPSAPPGVFFCNQCNAGLPDFESFRNHLKSHIAEGM-QLVCPHCGMSLPEQSEFERHVVG
OAZ	ansisngeypcngcdlkfsnfesfgthlklhlelllrkgacpgckedfdsgesllghltv
EBFAZ	ansisngeypongodlkfsnfesfqthlklhlelllrkqacpqckedfdsqesllqhltv
ROAZ	ansisngeypongodlkfsnfesfgthlklhlelllrkgaopgokedfdsgesllghltv
	. * . * : ****: :.:****:.*** *: ::.**:* .: .*: :*:.
DmOAZ	HFLITGSEFNCSSSCGKSFAKSEDLOOHLLSEHVLTLLKCSLCSELCESRMAMOLHLACA
OAZ	hymttsthyvces-cdkqfssvddlqkhlldmhtfvlyhctlcqevfdskvsiqvhlavk
EBFAZ	hymttsthyvces-cdkqfssvddlqkhlldmhtfvlyhctlcqkvfdskvsiqvhlavk
ROAZ	hymttsthyvces-cdkqfssvddlqkhlldmhtfvlyhctlcqevfdskvsiqvhlavk
ROAZ	*:: *.:: *.* *.* *.*: :***:** *.:. *::*::::*::*
	-
DmOAZ	HSQETKLLRCSACLELFRSDAEFHVHVKTRHQLGGHPTLGATSSAPTNPLQCMFCRAVCS
OAZ	hsnekkmyrctacnwdfrkeadlqvhvkhshlgnpakahkcifcgetfs
EBFAZ	hsnekkmyrctacnwdfrkeadlqvhvkhshlgnpakahkcifcgetfs
ROAZ	hsnekkmyrctacnwdfrkeadlqvhvkhshlgnpakahkcifcgetfs **: *: **: ** **.: *: : : : * * * * * *
DmOAZ	SELEMHFHLAAHARQFRCPSCPETFHVEFLLDRHMQSQHGGVKDKEANSPNMGSLYVNAL
OAZ	tevelqchitthskkynckfcskafhaiillekhlrekh
EBFAZ	tevelgchitthskkyncrfcskafhavillekhlrekh
ROAZ	tevelgchitthskkyncrfcskafhavlllekhlrekh
	1*1*11 *111*1111.* *.11**. 1**11*11.1*
DmOAZ	LPPLAAAAAAAATNNNSSIIDYNVAFKGLFGGASGGAGSGGGAQSGGAPPSANKFYSP
OAZ	cvfdaatengtang
EBFAZ	cvfdaaaengtang
ROAZ	cvfdpaaengtang
	··· ·· *
	*** ** ***

TOUR MAT VACAGE BEAT MUCT CODUL MEMON & VCMC DCCNECUCNCODES DOS _ MADED

DmOAZ	LQVDTNALKAQTSPHPALMYGLSQRYLMEMYAAKSTSPSGNEGVGNSQPPAPQA-TAPPP
OAZ	vppmatkkaepadlqgmllknpeapnsheased
EBFAZ	vpptstkkaepadlqgmllknpeapnsheased
ROAZ	vpptstkkaepadlqgmllknpeapnsheased
	: ::*.:.*: :*: .:* **:: *.
DmOAZ	PPNASTATFSCGMCERQDLRSEAELHSHRKLAHNLKTGVSLRCAYCA
OAZ	dvdasepmygcdicgaa-ytmevllqnhrlrdhnirpgeddgsrkkaefikgshkcnvcs
EBFAZ	dvdasepmygcdicgaa-ytmevllqnhrlrdnnirpgeddgsrkkaefikgshkcnvcs
ROAZ	dvdasepmygcdicgaa-ytmevllqnhrlrdnnirpgeddgsrkkaefikgshkcnvcs
ROAZ	:** . :.*:
	100 . 1.0.10 0. 01.00 0.11.0
DmOAZ	GNFKSRAELEQHMKSCHNSTGKHKCLICDEVFPSPAILAEHKLQHSKVGQSGKCSHCGQP
OAZ	rtffsenglrehlqthrgpakhymcpicgerfpslltltehkvthsksldtgtcrickmp
EBFAZ	rtffsenglrehlqthrgpakhymcpicgerfpslltltehkvthsksldtgtcrickmp
ROAZ	rtffsenglrehlqthrgpakhymcpicgerfpslltltehkvthsksldtgtcrickmp
	.* *. *.:*::: :: :: * **.* *** *:***: *** ::*.* * *
DmOAZ	LEDVAAFRAHLSEHGSDGASLP-LACICCRQTLHSEFELSLHAKFHTKSSSS
OAZ	${\tt lqseeefiehcqmhpdlrnsltgfrcvvcmqtvtstlelkihgtfhmqklagssaasspn}$
EBFAZ	lqsee efiehcqmhpdlrnsltgfrcvvcmqtvtstlelkihgtfhmqklagssaasspn
ROAZ	${\tt lqseeefiehcqmhpdlrnsltgfrcvvcmqtvtstlelkihgtfhmqklagssaasspn}$
	*:. * * . * . **. : *: * **: * :**.:*** : **
DmOAZ	GGSLOEPV-CALCLEPLPDATEGPAKLCDKCCRKHNLNGKRGKHSEP
OAZ	gqglqklykcalclkefrskqdlvkldvnglpyglcagcmar-sangqvgglappepadr
EBFAZ	gqglqklykcalclkefrskqdlvrldvnglpyglcagcmar-sangqvgglappepadr
ROAZ	gqglqklykcalclkefrskqdlvrldvnglpyglcagcmar-sangqvgglappepadr
	* .**:
DmOAZ	ATSLPAPPSAF
OAZ	pcaglrcpecsvkfesaedleshmqvdhrdltpetsgprkgtqtspvprkktyqcikcqm
EBFAZ	pcaglrcpecnvkfesaedleshmqvdhrdltpetsgprkgaqtspvprkktyqcikcqm
ROAZ	pcaglrcpecnvkfesaedleshmqvdhrdltpetsgprkgaqtspvprkktyqcikcqm
37.777	1
DmOAZ	venrcnlckmilphaokloehlventfagteorgfncyic
OAZ	tfenereigihvanhmieeginhecklcnqmfdspakllchliehsfegmggt-fkcpvc
EBFAZ	tfenereigihvanhmieeginhecklcngmfdspakllchliehsfegmggt-fkcpvc
ROAZ	tfenereigihvanhmieeginhecklcnqmfdspakllchliehsfegmggt-fkcpvc
	111.*1**1 11 . ** **1**1* * *1* 1*
DmOAZ	SAVFTAPGGLLNHM-GEHGAHSRPYDCNLCPEKFFFRAELEHHQRGHELRPQARPPAAKV
OAZ	ftvfvqanklqqhifavhgqedkiydcsqcpqkfffqtelqnhtmsqhaq
EBFAZ	ftvfvqanklqqhifavhgqedkiydcsqcpqkfffqtelqnhtmsqhaq
ROAZ	ftvfvqanklqqhifavhgqedkiydcsqcpqkfffqtelqnhtmsqhaq
	1** * 1*1 . **1 ***. **!****!!**!!* .!. !
DmOAZ	PUDCIDNMCDCOCDUDCDMIUVORI VEMONURCA CUEDERENURDEREVIRENCA PURO
OAZ	EVPSIRNTSPGQSPVRSPTIVKQELYETDTVESAGVEDEPENHPDEEEYIEVEQMPHETR
EBFAZ	
ROAZ	
NONE	
DmOAZ	PSGIGSQLERSTSSA
OAZ	
EBFAZ	

ROAZ

Figure S1 Complete am ino acid sequence alignmentofDmOAZ withOAZ, EBFAZ and ROAZ. The ZFs ofOAZ and DmOAZ are shown in blue and red, respectively. Asterisks (*) indicate an entirely conserved column, a colon (:) indicates columns where all residues have roughly the same size and hydropathy level, and a period (.) indicates columns where either the size or the hydropathy level has been conserved during evolution (JPEG 12mb)