

Figure S3  
Sawyer et al.

Human aa:	1	(N-terminus)	(Active Site 1)	58	
AGM	MNPQ	IRNMVEQMEP	DIFVYYFN	NRPILSG   RNTVWLCYEVK--TKDPSGPPLDANIFQGKL	
Patas	MKP	HFRNTVERMYRGTFFYNFN	NRPILSR   RNTVWLCYEVK--TRGPSMPTWGAKIFRGQL		
CrestMac	MKP	QFRNTVERMYRGTFFYSFN	NRPILSR   RNTVWLCYEVK--TRGPSMPTWGTFKIFRGQV		
CrabEatMac	MQP	QYRNTVERMYRGTFFYNFN	NRPILSR   RNTVWLCYEVK--TRGPSMPTWDTKIFRGQV		
Baboon	MKP	QFRNTVERMYRDTFFYNFN	NRPILSR   RNTVWLCYEVK--TRGPSMPTWDAKIFRGQV		
Chimp	MKP	HFRNPVERMYQDTFSDNFYN	NRPILSH   RNTVWLCYEVK--TKGPSRPPLDAKIFRGQV		
Bonobo	MKP	HFRNPVERMYQDTFSDNFYN	NRPILSR   RNTVWLCYEVK--TKGPSRPPLDAKIFRGQV		
Human	MKP	HFRNTVERMYRDTFSYNFY	NRPILSR   RNTVWLCYEVK--TKGPSRPPLDAKIFRGQV		
Gorilla	MTP	QFRNTVERMYRDTFSYNFN	NRPILSR   RNTVWLCYEVK--TKDPSRPPLDAKIFRGQV		
Orangutan	MNP	QFRNMVDGMDPHKFSYNFK	NRPILSR   RNTVWLCYEVK--TKGPSRPPLDAKIFRGQV		
WoollyMon	MKP	QTRNTVVRMDPDTFFYNFY	NRPILSH   RNTVWLCYEVKMKMTNDPSRPPLVANIFQGQV		
Tamarin	MKP	QTRNTVVRMDPDTFFYDFY	NRPI LSD   RNTVWLCYEVKMKMTNDRSRPPLVAKILEGQV		
Human aa:	59			117	
AGM	Y-PEAKD	<b>HPE</b> MKFLHWFRKWRQLHRDQ	EYEV	TWYVSW <b>SPCTRC</b> CANSVATFLAEDPKVTLT	
Patas	Y-PEAKD	<b>HPE</b> MKFLHWFRKWRQLHRDQ	EYEV	TWYVSW <b>SPCTRC</b> CANSVATFLAEDPKVTLT	
CrestMac	Y-SKAKY	<b>HPE</b> MRFLRWF	SKWRQLHHDQ	EYKVTWYVSW <b>SPCTRC</b> CANSVATFLAKDPKVTTLT	
CrabEatMac	LR	SKAKY <b>HPE</b> MRFLHWFR	EWRLHHDQ	EYKVTWYVSW <b>SPCTRC</b> CANSVATFLAKDPKVTTLT	
Baboon	Y-SKAKY	<b>HPE</b> MRFLHWFRKWRQLHRDQ	EYEV	TWYVSW <b>SPCTGC</b> CANSVATFLAEDPKVTLT	
Chimp	Y-SK	LKY <b>HPE</b> MRFFHWFSKWRKLHRDQ	EYEV	TWYISW <b>SPCTKCTR</b> DRVATFLAEDPKVTLT	
Bonobo	Y-SK	LKY <b>HPE</b> MRFFHWFSKWRKLHRDQ	EYEV	TWYISW <b>SPCTKCTR</b> DRVATFLAEDPKVTLT	
Human	Y-SEL	KY <b>HPE</b> MRFFHWFSKWRKLHRDQ	EYEV	TWYISW <b>SPCTKCTR</b> DMATFLAEDPKVTLT	
Gorilla	Y-SEL	KY <b>HPE</b> MRFFHWFSKWRKLHRDQ	EYEV	TWYISW <b>SPCTKCTR</b> RVATFLAEDPKVTLT	
Orangutan	Y-FEL	KN <b>HPE</b> MRFFHWFSKWRKLHRDQ	ECEV	TWYMSW <b>SPCTKCTR</b> RVATFLAEDPKVTLT	
WoollyMon	S-FN	PE <b>HAEM</b> YFLSWFR-GNLL	PACKRSQITW	FVSW <b>NPCLYC</b> VAKVAEFLAEHPKVTLT	
Tamarin	H-FD	PE <b>HAEM</b> YFLSWFR-GNLL	QACKSSQITW	FVSW <b>NPCLNC</b> VAKVAEFLAEHPNVTTLT	
Human aa:	118	128	(Linker 1)	(PseudoActive Site 1)	177
AGM	IFV   ARLYYFWK	PDYQQALRILCQ	ERGGPHATMKIMNYNEFQHCW   NEFVDGQ	GKPFKPRKN	
Patas	IFV   ARLYYFWK	PDYQEALRILCQ	KRGPHATMKIMNYNEFQHCW   NEFVDGQ	GKPFKPRKN	
CrestMac	IFV   ARLYYFWK	PDYQQALRILCQ	KRGPHATMKIMNYNEFQDCW   NKFVDGR	GKPFKPRNN	
CrabEatMac	IFV   ARLYYFWK	PDYQQALRILCQ	KRGGLHATMKIMNYNEFQDCW   NKFVDGG	GKPFKPRNN	
Baboon	IFV   ARLYYFWK	PDYQEALRVLCQ	KRGSPHATMKIMNYNEFQHCW   NKFVVRGR	REPPEPWNEN	
Chimp	IFV   ARLYYFWD	PDYQEALRSLCQ	KRDGPRATMKIMNYDEFQHCW   SKFVYSQ	RELPEPWNEN	
Bonobo	IFV   ARLYYFWD	PDYQEALRSLCQ	KRDGPRATMKIMNYDEFQHCW   SKFVYSQ	RELPEPWNEN	
Human	IFV   ARLYYFWD	PDYQEALRSLCQ	KRDGPRATMKIMNYDEFQHCW   SKFVYSQ	RELPEPWNEN	
Gorilla	IFV   ARLYYFWD	QDYQEALRSLCQ	KRDGPRATMKIMNYDEFQHCW   SKFVYSQ	RELPEPWNEN	
Orangutan	IFV   ARLYYFWD	PDYQEALRSLCQ	ERDGRANMKIMNYDEFQHCW   NKFVYSQ	RELPEPWNEN	
WoollyMon	VST   ARLYCYR	KKDWRRALRKL	SQTG----ARVKIMDYEEFQHCW   DNFVDNQ	REPPEPWNEN	
Tamarin	VST   ARIYCYW	KKDWRRALRKL	CQTG----ARVKIMNYKEFAYCW   ENFVYKER	KPFYRWDK	

Human aa: 178 (Active Site 2) 237

AGM LPKHYTLLHATLGE LLRHVMDPGTFTSNFNKPVVSG | QRETYLCYKVERSHNDTWVLLNQ

Patas LPKHYTLLHATLGE LLRHVMDPGTFTSNFNKPVVSG | QRETYLCYKVERSHNDTWVLLNQ

CrestMac LPKHYTLLQATLGE LLRHLM DPGTFTSNFNKPVVSG | QHETYLCYKVERLHNDTWVPLNQ

CrabEatMac LPKHYTLLQATLGE LLRHLM DPGTFTSNFNKPVVSG | QHETYLCYKVERLHNDTWVPLNQ

Baboon LPKHYTLLHATLGE LLRHLM DPGTFTSNFYKPVVSG | QHETYLCYKVERLHNGTWVPLNQ

Chimp LPKYYILLHIMLGE I LRHSMDPPTFTSNFNELWVRG | RHETYLCYEVERLHNDTWVLLNQ

Bonobo LPKYYILLHIMLGE I LRHSMDPPTFTSNFNELWVRG | RHETYLCYEVERLHNDTRVLLNQ

Human LPKYYILLHIMLGE I LRHSMDPPTFTSNFNELWVRG | RHETYLCYEVERMHNDTWVLLNQ

Gorilla LPKYYMLLHIMLGE I LRHSMDPPTFTSNFNELWVRG | RHETYLCYEVERLHNDTWVLLNQ

Orangutan LPKYYIVLHIILGE I LRHSMDPLTFTSNFNELWVRG | RHETYLCYKVERLHNDTWVLLNQ

WoollyMon LPKHYTLLRITLGEVLRHRMDPVTFTYNFTNDPSVLG | QHQSILCYKVEHLRNGTWVPLHQ

Tamarin FSGNYRFLRCKLQEI LRHLMDPGTFTYNFTNDPSVLG | RHQTYLCYEAHLHSGTWVPLHQ

Human aa: 238 297

AGM HRGF LRNQAPDRHGFPKGR**HAEL**CFLDLIPFWKLD-DQQYRVTCFTSWS**PCF**S**CAQ**KMAK

Patas HRGF LRNQAPDRHGFPKGR**HAEL**CFLDLIPFWKLD-DQQYRVTCFTSWS**PCF**S**CAQ**KMAK

CrestMac HRGF LRNQAPNIHGFPKGR**HAEL**CFLDLIPFWKLD-GQQYRVTCFTSWS**PCF**S**CAQ**EMAK

CrabEatMac HRGF LRNQAPNIHGFPKGR**HAEL**CFLDLIPFWKLD-GQQYRVTCFTSWS**PCF**S**CAQ**EMAK

Baboon HRGF LRNQAPDIHGFPKGR**HAEL**CFLDLIPFWKLD-GQQYRVTCFTSWS**PCF**S**CAQ**EMAK

Chimp RRGFLCNQAPHKHGFLEGR**HAEL**CFLDVI PFWKLDLHQDYRVTCFTSWS**PCF**S**CAQ**EMAK

Bonobo RRGFLCNQAPHKHGFLEGR**HAEL**CFLDVI PFWKLDLHQDYRVTCFTSWS**PCF**S**CAQ**EMAK

Human RRGFLCNQAPHKHGFLEGR**HAEL**CFLDVI PFWKLDLHQDYRVTCFTSWS**PCF**S**CAQ**EMAK

Gorilla RRGFLCNQAPHKHGFLEGR**HAEL**CFLDVI PFWKLDLHQDYRVTCFTSWS**PCF**S**CAQ**EMAK

Orangutan RRGFLCNQAPAIHGFPKGR**HAEL**CFLDVI PFWKLDGKQRYRVTCFTSWS**PCF**S**CAQ**EMAK

WoollyMon HRGFILNEASNSVSFPEGR**HAEL**CLLDLISFWKLDPAQTYRVTCFISWS**PCF**S**CAE**KVAE

Tamarin HRGFILNEASNLSFPEGR**HAEL**CLLDLISFWKLDPAQTYRVTCFISWS**PCF**S**CAQ**EVAE

Human aa: 298 (Linker 2) (Pseudo-Active Site 2) 357

AGM FISNNKHVSLCIFA | ARIYDDQGR**CQ**EGLRTLHRDGAKI **I**AVMNYSEFEYCW | DTFVDRQGRP

Patas FISKKKHVSLCIFA | ARIYDDQGR**RQ**EGLRTLHRDGAKI **I**AVMNYSEFKHCW | DTFVDHQGRP

CrestMac FISNNEHVSLCIFA | ARIYDDQGR**YQ**EGLRTLHRDGAKI **I**AMMNYSEFEYCW | DTFVDRQGRP

CrabEatMac FISNNEHLSLCIFA | ARIYDDQGR**YQ**EGLRTLHRDGAKI **I**AMMNYSEFKHCW | DTFVDRQGRP

Baboon FISNNEHVSLCIFA | ARIYDDQGR**CQ**EGLRTLHRDGAKI **I**AMMNYSEFEYCW | DTFVDRQGRP

Chimp FISNNKHVSLCIFA | ARIYDDQGR**CQ**EGLRTLAKAGAKI **S**IMTYSEFKHCW | DTFVDHQGCP

Bonobo FISNNKHVSLCIFA | ARIYDDQGR**CQ**EGLRTLAKAGAEI **S**IMTYSEFKHCW | DTFVDHQGCP

Human FISNNKHVSLCIFT | ARIYDDQGR**CQ**EGLRTLAEAGAKI **S**IMTYSEFKHCW | DTFVDHQGCP

Gorilla FISNNKHVSLCIFA | ARIYDDQGR**CQ**EGLRTLAEAGAKI **S**IMTYSEFKHCW | DTFVYHQGCP

Orangutan FISNNQHVSLCIFA | ARIYDDQGR**CK**EGLRTLDEAEAKI **S**IMTYDEFQHCW | DTFVDHQGRP

WoollyMon FLQENPHVNLHISA | ARIYDYQGR**YK**GLRRLDRAGTPI **S**MMKYSEFKHCW | DTFVDHQGHP

Tamarin FLHENPHVNLRIFA | ARIYDYRPG**YEE**GLLRSLWAGAPI **S**MMKYSGFSHCW | DTFVDHQGRS

Human aa:	358	385
AGM	FQPWDGLDEHSQALSGRLRAI-----	
Patas	FQPWDGLDEHSQALSGRLRAILQNQGN	
CrestMac	FQPWDGLDEHSQALSERLRAILQNQGN	
CrabEatMac	FQPWDGLDEHSQALSERLRAILQNQGN	
Baboon	FQPWDGLDEHSQDLSGRLRAILQNQGN	
Chimp	FQPWDGLEEHSQALSGRLRAILQNQGN	
Bonobo	FQPWDGLEEHSQALSGRLRAILQNQGN	
Human	FQPWDGLDEHSQDLSGRLRAILQNQEN	
Gorilla	FQPWDGLEEHSQALSGRLQAILQNQGN	
Orangutan	FLPWIRLHEHSEALSGRLRAILLNQGN	
WoollyMon	FQPWEELNEHSQALSGRLQAILQNQGN	
Tamarin	FKPWKGLNEHSQALSGRLQAILQIMGN	