

	20	40	60	80
Tgo	M			1
Kod1	M			1
9 ^N	M			1
Pfu	M			1
Vent	M			1
Mma	M			1
Mac	M			1
hPOLD	MDGKRRPGPG	GLWDDDDAPR	PSQF	EEEDLA LMEEMEAER
ScePOLD	MSEKRSR	PMVDVKI	DOEDTPO	LEKKIKRQSI
Pis	MELKVWP			DHGVGSEPVSI
Sso	MTKQLTLFDI	PSSKPAKSEQ	NT	
Pae	MELL			
Eco	MAQA			
RB89	MKE			
T4	MKE			
Phi29	MK			
Consensus	M			
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
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Eco				
RB89				
T4				
Phi29				
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Tgo			ILD	TDY
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Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY
Pfu			ILD	VDY
Vent			ILD	TDY
Mma			ELD	LDY
Mac			ELMDQLD	ADYEV
hPOLD	QEQQEEELQS	VLEGVADQGV	PPSAIDPRWL	RPTPPALDPQ
ScePOLD	ESTFEQELSQ	MEHOMADQEE	HDLSSFERKK	LPTD
Pis			QQS	QOSAPVEEKK
Sso			QQS	VVRREMLEEA
Pae				
Eco				
RB89				
T4				
Phi29				
Consensus				
Tgo			ILD	TDY
Kod1			ILD	TDY
9 ^N			ILD	TDY

[illegible]

FIG. 1 (continued)

[illegible]

	500	520	540	560
Tgo	-GVKFILGR-	-EPKIQRM-	-GDRFAVEV-	-KGRlHF
Kod1	-GINFALGR-	-EPKIQRM-	-GDRFAVEV-	-KGRlHF
9'N	-GIKFTLGR-	-EPKIQRM-	-GDRFAVEV-	-KGRlHF
Pfu	-GIKFTLGR-	-EPKMQRI-	-GDMTFAVEI-	-KGRlHF
Vent	-GVRLTLGR-	-DKE	-HPEPKIQRM-	-KGRlHF
Mma	-GLELKLGR-	-NDE	-KIKITKG-	-KGRlHF
Mac	-ETINSVGR-	-DGS	-PIG--YRKF-	-KGRlHF
hPOLD	-FPF--LGRV	-AGLCSNIRDS	-SFQSKQIGR-	-KGRVUV
ScoPOLD	-FPY--FGRL	-KTVKQEI KES	-VFSSKAYGT-	-KGRVUV
Pis	-GVPLKVDRL	-SN	-PPQQSVY-	-KGRVUV
Sso	-EEIPIDVA-	-	-GKDEAKYL-	-KGRVUV
Pae	-VPLRLGR-	-GGDE	-MGWREHGSR-	-KGRVUV
Eco	-LPLRLGR-	-DNSE	-LEWREHGFK-	-KGRVUV
RB69	-FCES	-TAKRLSPHRK	-TRVKVIENMY	-KGRVUV
T4	-LGER	-SMKRFSPIGR	-VKSKLIONMY	-KGRVUV
Phi29	-RN	-GFKWSADGLP	-NTYNTIISRM	-KGRVUV
Consensus	-GI-L-LGR-	-EPKIQRM-	-GDRFAVEI-	-KGRlHF
Tgo	-AIFGQPKK-	-VYAEIEA	-QAW-ETGEGL	-AKVTYELG-
Kod1	-AVFGQPKK-	-VYAEIEA	-TAW-ETGENL	-AKVTYELG-
9'N	-AVFGQPKK-	-VYAEIEA	-QAW-ESGEGN	-AKVTYELG-
Pfu	-AIFGQPKK-	-VYAEIEA	-KAW-ESGENL	-AKVTYELG-
Vent	-AVLGTQTSK-	-LGAEIEA	-AIW-EETESM	-AKVTYELG-
Mma	-ALFDVKKVD-	-VGHENIP	-KMW-DNLD-	-AKVTYELG-
Mac	-ELLSREKLD-	-VPPLEME	-EHWNDSGDKF	-AKVTYELG-
hPOLD	-HFLGEQKED-	-VQHSIIT	-DLQNGNDQTR	-AKVTYELG-
ScoPOLD	-HFLGEQKED-	-VQHSIIT	-DLQNGDSETR	-AKVTYELG-
Pis	-YFGVMKREE	-RVLI PGHKIY	-EYWKDPNK-R	-AKVTYELG-
Sso	-ALLGTSKVKV	-DTLSFLD-	-IDV	-AKVTYELG-
Pae	-TLLGSKAID	-NPYQRMDEID	-RMF--AEDK	-AKVTYELG-
Eco	-ELLGEGKSID	-NPWORMDEID	-RRF--AEDK	-AKVTYELG-
RB69	-FELNVGKLKY	-DGPISKLR-	-ESNH	-AKVTYELG-
T4	-HETKKGKLPY	-DGPINKLR-	-ETHN	-AKVTYELG-
Phi29	-DEF	-KLT	-VLKGDIDYHK	-AKVTYELG-
Consensus	-ALLGXKXKEK-	-VYAEIEA	-AW-E-GENL	-AKVTYELG-
Tgo	-WDVSRSSSTG	-KEFFPME--A	-QLSRLVGQSL	-WDVSRSSSTG
Kod1	-WDVSRSSSTG	-KEFFPME--A	-QLSRLVGQSL	-WDVSRSSSTG
9'N	-WDVSRSSSTG	-KEFFPME--A	-QLSRLVGQSL	-WDVSRSSSTG
Pfu	-WDVSRSSSTG	-KEFFPME--A	-QLSRLVGQSL	-WDVSRSSSTG
Vent	-WDVSRSSSTG	-KEFFPME--A	-ELAKLIGQSV	-WDVSRSSSTG
Mma	-YDINRMSSS	-EQFLPLE--I	-MFSRVVNQSL	-YDINRMSSS
Mac	-QEIVDGGQT	-LELRLLDKYI	-ALAQVSGSL	-QEIVDGGQT
hPOLD	-SYLLSRGQQV	-EKLMLVNAY	-EMARVTGVPF	-SYLLSRGQQV
ScoPOLD	-SYLLSRGQQV	-EKLMLVNAY	-EMARVTGVPF	-SYLLSRGQQV
Pis	-D-QVAAAASVG	-DKLLPF--LI	-QLSSVSGLPL	-D-QVAAAASVG
Sso	-E-ELTRTEIS	-NDLTKMLIV	-LFSRISRLGI	-E-ELTRTEIS
Pae	-D---RSGGSV	-ERATVTLGPA	-ERATVTLGPA	-D---RSGGSV
Eco	-D---RHGGSV	-TEIMPF--LL	-ERATVTLGPA	-D---RHGGSV
RB69	-QSVFSPIKTW	-QFIFNL--SL	-DMGYAKIOL	-QSVFSPIKTW
T4	-SGVMSPIKTW	-RGFIDL--VL	-SMSYYAKMPF	-SGVMSPIKTW
Phi29	-DRMTAGSDSL	-IQIFAEALLI	-QFK--OGL	-DRMTAGSDSL
Consensus	-WDVSRSSSTG	-KEFFPME--I	-QLSRVXGQPL	-WDVSRSSSTG

		660	680	700	720			
Tgo	NLVEWFLLRK	AYERNELAPN	KPDERELARR	---RES---	---YAGGYV-	GLWE-NIVYL	DFRSLYPSI	413
Kod1	NLVEWFLLRK	AYERNELAPN	KPDEKELARR	---RQS---	---YAGGYV-	GLWE-NIVYL	DFRSLYPSI	413
gN	NLVEWFLLRK	AYKRNELAPN	KPDERELARR	---RGG---	---YAGGYV-	GLWD-NIVYL	DFRSLYPSI	413
Pfu	NLVEWFLLRK	AYERNEVAPN	KPSEEEYKRR	---LRSS---	---YTGGFV-	GLWE-NIVYL	DFRALYPSI	414
Vent	NLVEWYLLRK	AYARNELAPN	KPDEEYKRR	---LRSS---	---YTGGFV-	GLWE-NIVYL	DFRSLYPSI	416
Mna	QMVYLLLLKN	SYKMGVAPN	RPSGKEYQKR	---IRSS---	---YEGGYV-	GIHE-DIVSM	DFSLYPSI	422
Mec	SMVETLLRLR	FGLKDRVILP	KPGDELSAER	YDMSDD---	---LKGGEV-	GLLE-NVLIL	DYKSLYPTIM	490
hPOLD	KVVSQ-LLRQ	AMHEGLLMPV	VKSEGG----	---ED---	---YTGATV-	GYDVPVIAL	DFSSLYPSIM	611
ScsPOLD	KVVSQ-LLRK	CLEIDTVIPN	MQSQAS----	---DDQ---	---YEGATV-	GYDVPVIAL	DFNSLYPSIM	617
Pis	NRVEWMLLRV	AYRLGEVAPN	R-EEREY---	---EP---	---YKGAIV-	GMVE-DVLVL	DFSSMYPNIM	431
Sso	TWKNLYYWE	HRKRNWLPL	K-EETLAKS	SNIRTSALIK	GRGYKGAIV-	GIF-FNITVL	DFASLYPSI	523
Pae	AAFTHLYMPL	MHRAGFVAPN	LGEKRPEAS	---	---PGGFV-	GLYE-SVLVL	DYKSLYPSI	430
Eco	AAFGLHYFPR	MHRAGYVAPN	LGEVPPHAS	---	---PGGFV-	GLYD-SVLVL	DYKSLYPSI	428
RB69	DAI-----IFNS	LKEQNKVLPQ	GRSHPVQPV	---	---YPGAIV-	NRYKY-VMSF	DLTSLYPSI	420
T4	DAI-----IFNS	LKGEHKVLPQ	QGS HVKQS---	---	---FPGAIV-	IARRY-IMSF	DLTSLYPSI	417
Phi29	KGFKDITTK	KFKKVFPPLS	LGLDKEV---	---	RYAVRGGFTW	LNDRFKEKEI	DVNSLYPAQM	258
Consensus	NLVEWLLLRK	AYERNEVAPN	KPSEXEXA---	---R-----	---YPGGYV-	GLYE-NIVXL	DFRSLYPSI	1
		740	760	780	800			
Tgo	ITHNVSPDIL	-NREGCEEY-	---DVAPQ-	---V---GHK	FC--KDFPGF	LLEEROKVKK	---KM---	467
Kod1	ITHNVSPDIL	-NREGCKEY-	---DVAPQ-	---V---GHR	FC--KDFPGF	LLEEROKIKK	---KM---	467
gN	ITHNVSPDIL	-NLEGCKEY-	---DVAPQ-	---V---GHK	FC--KDFPGF	LLEEROKIKR	---KM---	467
Pfu	ITHNVSPDIL	-NLEGCKNY-	---DIAPQ-	---V---GHK	FC--KDFPGF	LLEEROKIKT	---KM---	468
Vent	ITHNVSPDIL	-EKEGCKNY-	---DVAPIL-	---V---GYR	FC--KDFPGF	LAMRQDICK	---KM---	470
Mna	MSHNLSPETI	-DCTCCSDE-	---ENGINE	EIL---GHK	FC--KKSIGI	LINRRKKVKK	---VL---	479
Mec	MAHNLCTYTV	VTRDRPDGK-	---TIKPPS	EIL---GGE	FVPEVEFRGI	LNKRQDITKK	---RM---	547
hPOLD	MAHNLCTYTL	LRPGTAQKL-	---GLTEDQ	FIRPTIGDE	FVKTSTVRKGL	LLSARKRAKA	---EL---	674
ScsPOLD	MAHNLCTYTL	CNKATVERL-	---NLKIDE	DYVITPNQDY	FVTKRRRGGI	LISARKRAKK	---DL---	681
Pis	MKYNLSPDIT	LEPGEPD---	---PPEG	VNVAPEVGHG	FVTRSPPGF	LVELRKAVRE	---EA---	489
Sso	RTWNLSYETV	DIOQCKKPY-	---EVKDET	GEVL---HI	VC--MDRPGI	LRDFRVKIKY	---ER---	579
Pae	RTFLIDPVGL	---VEGL	HSVEGFGRGAR	HSVEGFGRGAR	FSKTRH---C	VWEGREAAKR	---OG---	486
Eco	RTFLIDPVGL	---VEGM	HSTEGFLDAW	HSTEGFLDAW	LPETV---TN	IWHGRDEAKR	---OG---	484
RB69	RQVNI SPETI	AGTFKVAPLH	DYINAVAEAP	SDVYSCSPNG	MMYKYDRDGV	VFNQRKEHKG	---YMLAAQR	494
T4	RQVNI SPETI	RQGFKVHPPIH	EYIAGTAPKP	SDEVYSCSPNG	MMYDKHQEGY	VFFORKQWKK	---KMPAEEM	491
Phi29	YSRLLPYG--	---EPIV	FECKYVWQED	YPLH---IQH	RCFELKEGY	FYKGNELYS	SGGEIADLWL	328
Consensus	XTHNLSPDIL	-NREGCXPY-	---DVAPE-	---V---GHX	FC--KDFPGF	LLEERKIKK	---KM---	---

FIG.1(continued)

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Tgo	820	840	860	880
Kod1	---	---	---	---
9 ^N	---	---	---	---
Pfu	---	---	---	---
Vent	---	---	---	---
Mna	---	---	---	---
Mac	---	---	---	---
hPOLD	---	---	---	---
ScePOLD	---	---	---	---
Pis	---	---	---	---
Sso	---	---	---	---
Pae	---	---	---	---
Eco	---	---	---	---
R869	---	---	---	---
T4	---	---	---	---
Phi29	---	---	---	---
Consensus	---	---	---	---
Tgo	900	920	940	960
Kod1	---	---	---	---
9 ^N	---	---	---	---
Pfu	---	---	---	---
Vent	---	---	---	---
Mna	---	---	---	---
Mac	---	---	---	---
hPOLD	---	---	---	---
ScePOLD	---	---	---	---
Pis	---	---	---	---
Sso	---	---	---	---
Pae	---	---	---	---
Eco	---	---	---	---
R869	---	---	---	---
T4	---	---	---	---
Phi29	---	---	---	---
Consensus	---	---	---	---

FIG.1(continued)

	980										1000										1020										1040																																							
Tgo	TVKK--ADAE										AKEFLDYINA										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										599									
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Ptu	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										600									
Vent	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										602									
Mma	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										618									
hPOLD	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										618									
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Pis	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										618									
Sso	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Pae	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Eco	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
RB89	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
T4	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Phi29	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Consensus	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
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Eco	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
RB89	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
T4	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
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Consensus	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Tgo	TVKK--ADAE										AKEFLDYINA										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										599									
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hPOLD	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										618									
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T4	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Phi29	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Consensus	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
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9'N	TVKK--ADAE										KAEFLKYINP										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										599									
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Mma	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										618									
hPOLD	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										618									
ScaPOLD	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										618									
Pis	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										618									
Sso	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Pae	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Eco	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
RB89	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
T4	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Phi29	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Consensus	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Tgo	TVKK--ADAE										AKEFLDYINA										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										599									
Kod1	TVKK--ADAE										AMEFLKYINA										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										599									
9'N	TVKK--ADAE										KAEFLKYINP										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										599									
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Vent	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										602									
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hPOLD	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										618									
ScaPOLD	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										618									
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Sso	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
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RB89	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
T4	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Phi29	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Consensus	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										611									
Tgo	TVKK--ADAE										AKEFLDYINA										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										599									
Kod1	TVKK--ADAE										AMEFLKYINA										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										599									
9'N	TVKK--ADAE										KAEFLKYINP										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										599									
Ptu	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF										--V-TK										KKYAV-IDE										600									
Vent	TVKK--ADAE										KAEFLKYINS										KLPGLLELEY										EGFYKRGFF																																							

	1140	1160	1180	1200
Tgo	I YEQITRDLK	DYKATG	RL	ISYIVLKSG
Kod1	I HEQITRDLK	DYKATG	RL	ISYIVLKSG
9 ^N	I HEQITRDLK	DYKATG	RL	ISYIVLKSG
Phi	I YEQITRPLH	EYKAIG	KL	ISYIVLKSG
Vent	I HEQITRDLK	DYKAIG	RL	ISYIVLKSG
Mna	I HTQLTKR1E	DYKTTA	KL	ISYIVLKSG
Mec	L TRTLTRKAD	SYNKKQ	NL	ISYIVLKSG
hPOLD	I SKTELTRAAS	DYAGKQ	RM	ISYIVLKSG
ScePOLD	ISKTLT	AP	NYTNPQ	ISYIVLKSG
Pis	I WKTLDKELD	EYKAYP	IL	ISYIVLKSG
Sso	FK VMLSKPLD	AYKKNT	OL	ISYIVLKSG
Pae	YRKRLRRRLD	DYQRNV	IL	ISYIVLKSG
Eco	YRKRLRRRLS	EYQRNV	IL	ISYIVLKSG
RB69	ASVSSANNIA	KYDVGGFPGP	L	ISYIVLKSG
T4	AEVKTANDIA	KYDDKGWPGF	L	ISYIVLKSG
Phi29	IKKEVT	FE	NFK-VGFSRK	ISYIVLKSG
Consensus	HKQLTRDL	DYKATG	RL	ISYIVLKSG
Tgo	YDAEYYIENQ	VL	PAVERI	755
Kod1	YDAEYYIENQ	VL	PAVERI	755
9 ^N	YDAEYYIENQ	VL	PAVERI	755
Phi	YDAEYYIENQ	VL	PAVERI	755
Vent	YDQDYIENQ	VL	PAVERI	756
Mna	YDTNYYIENQ	IL	PPVIRL	758
Mec	IDVDYYVKKQ	IL	PPVIRL	877
hPOLD	IDTOYYLEQQ	LA	PKLLRI	1027
ScePOLD	IDTSYYLTNQ	LQ	NP1ISI	1025
Pis	IDIDYYIERQ	IL	PAALRI	771
Sso	IDAEKYLE	A	LR	864
Pae	IDYEHYVGKQ	LQ	PVADAI	780
Eco	LDYEHYLTQ	LQ	PVADAI	776
RB69	DDVLHWMYD	Y	LLKTFIKP	891
T4	SDVLSWIDHS	TLFQKSFVKP	L	887
Phi29	VDDFTFK			575
Consensus	YDAEYYIENQ	VL	PAVERI	

	1300	1320	1340	1360	
Tgo	---R YQKTR QVGLGAW- -L	---KPK- T- - - - -	--- - - - -	--- - - - -	773
Kod1	---R YQKTR QVGLSAW- -L	---KPKGT- - - - -	--- - - - -	--- - - - -	774
9 ^N	---R YQKTK QVGLGAW- -L	---KVKGKK- - - - -	--- - - - -	--- - - - -	775
Phi	---R YQKTR QVGLTSW- -L	---NIK- KS- - - - -	--- - - - -	--- - - - -	775
Vent	---R YQSSK QTGLDAW- -L	---K- - - - R- - - -	--- - - - -	--- - - - -	774
Mna	---KDSK- K QYTLHF- - -L	---K- - - - -	--- - - - -	--- - - - -	784
Mec	---DFD- AK QKGLDFEFVK	---KPEAKKQEKSSQKGTNGKI	---YSENGRVEQR SLED- - - -	--- - - - -	F 937
hPOLD	FCQPRESELY QKEVSHLNAL	EEFVSRLWTQ CQRCQSSLHE	DVICTSRDCP DLEDEQLLR	RFGPPGPEAW	1107
ScePOLD	NCLARSGELY IKALYDVRDL	EEKYSRLWTQ CQRCAGNLHS	EVLCSENKNCDF YMRVKVKK	K- - - - -	W 1097
Pis	---KTK RMERSLLDFL	S- - - - -	--- - - - -	--- - - - -	785
Sso	---AA TMSIDSEFSY	PSKGN- - - - -	--- - - - -	--- - - - -	882
Pae	---DR QMAL- - - - -	--- - - - -	--- - - - -	--- - - - -	F 787
Eco	---TG QLGL- - - - -	--- - - - -	--- - - - -	--- - - - -	F 783
RB69	---EK KASLFDM- - - -	--- - - - -	--- - - - -	--- - - - -	EDF 903
T4	---EE KASLDFL- - - -	--- - - - -	--- - - - -	--- - - - -	FG 898
Phi29	--- - - - -	--- - - - -	--- - - - -	--- - - - -	575
Consensus	---R---TK QVGLXAW- -L	K- - - - -	--- - - - -	--- - - - -	

FIG.1(continued)

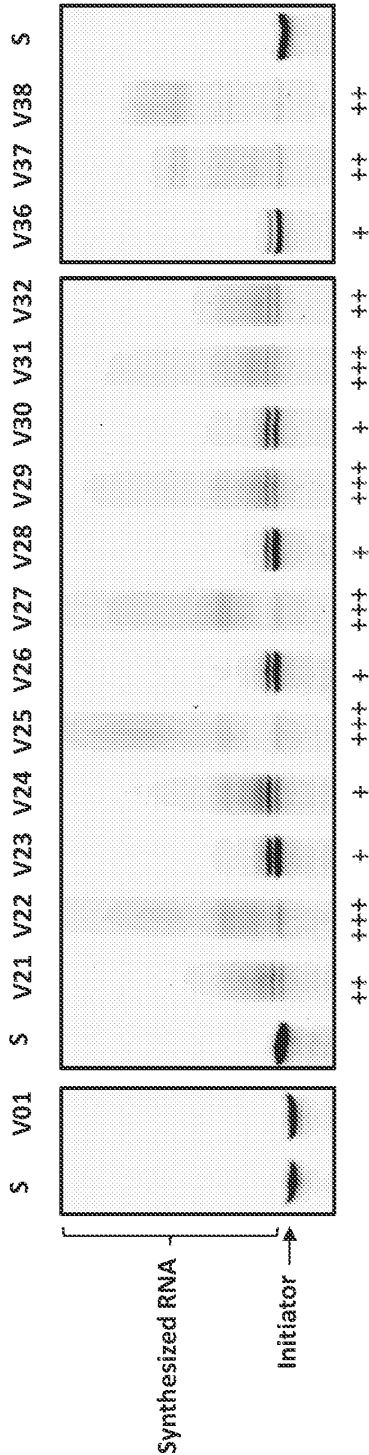


FIG.2A

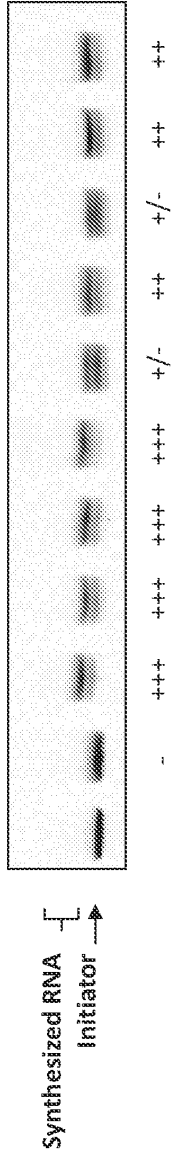


FIG.2B

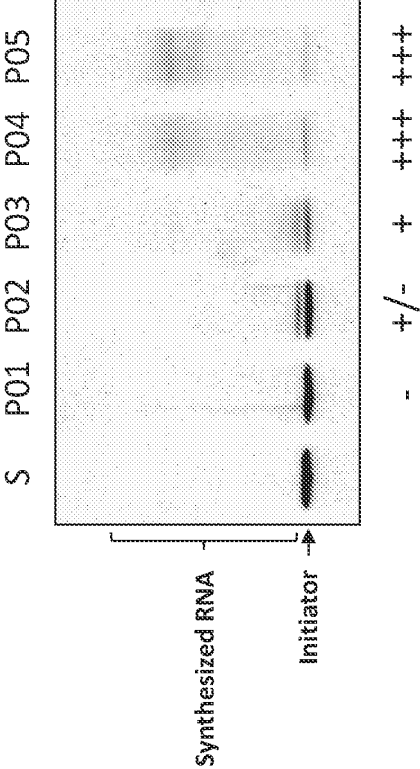


FIG.3A

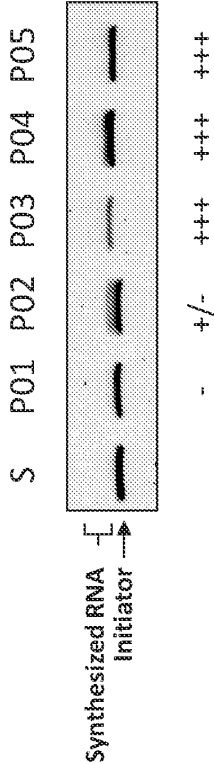


FIG.3B

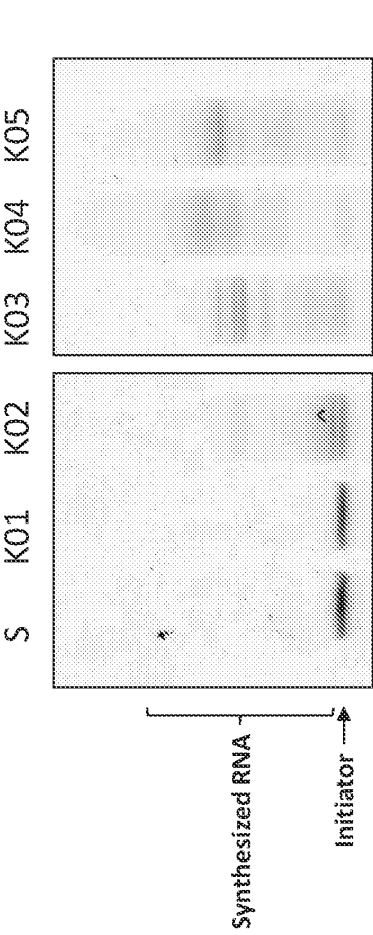


FIG.4A

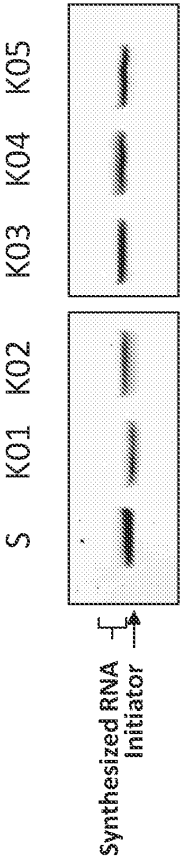


FIG.4B

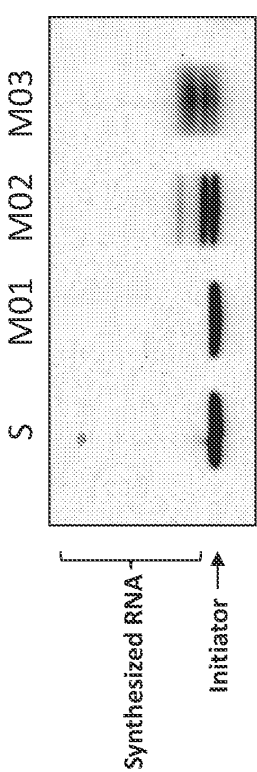


FIG.5A

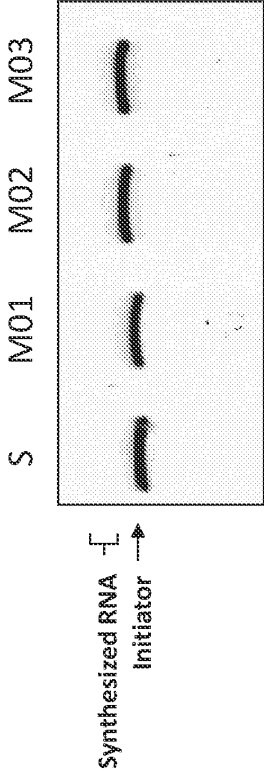


FIG.5B

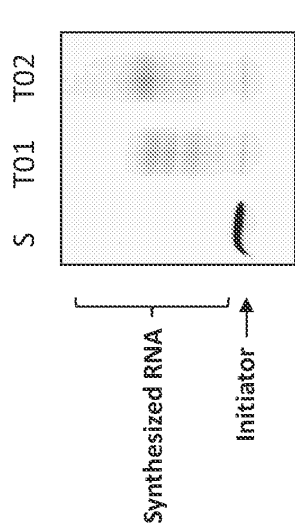


FIG.6A

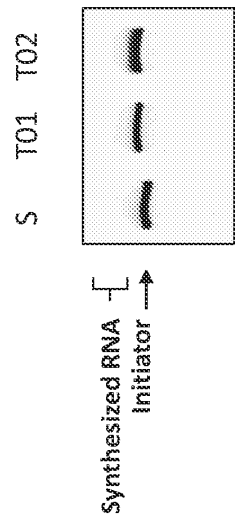


FIG.6B