

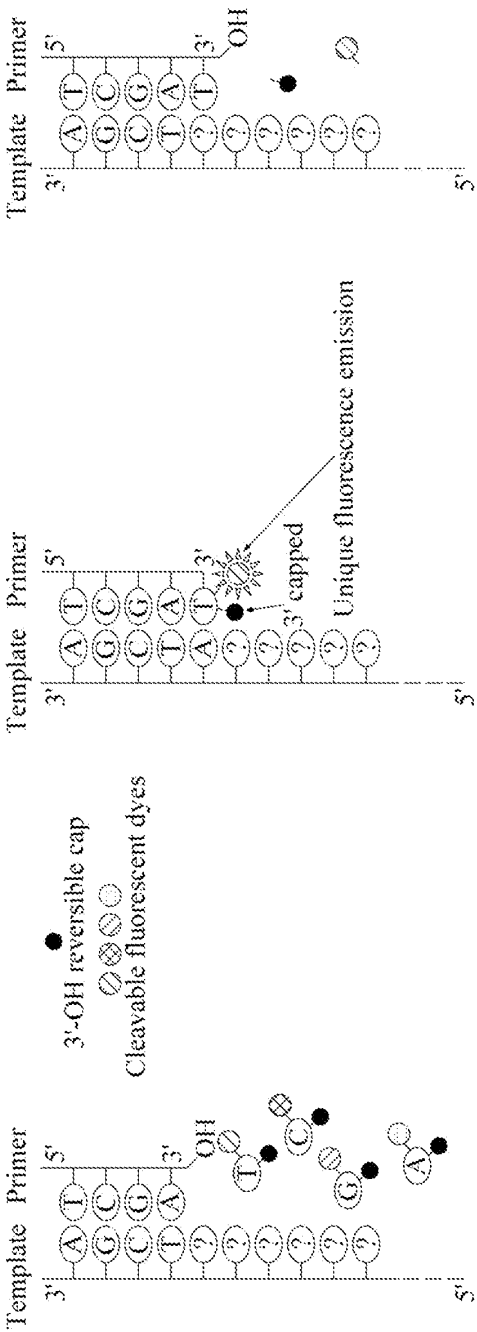


Fig.1

Fig.2(continued)

Fig.2(continued)

	100	120
Tgo	- - - - -	- - - - -
KOD1	- - - - -	- - - - -
9°N	- - - - -	- - - - -
Pfu	- - - - -	- - - - -
Vent	- - - - -	- - - - -
Mma	- - - - -	- - - - -
Mac	- - - - -	- - - - -
hPOLD	QEQEEEELSQ	VLEGVADQV PPSAIDPRWL RPTPPALDPQ 90
ScePOLD	ESTFEQELSQ	MEHDMADQEE HDLSSFERKK LPTD - - FDPS 109
Pis	- - - - -	- - - - -
Sso	- - - - -	- - - - -
Pae	- - - - -	- - - - -
Eco	- - - - -	- - - - -
RB69	- - - - -	- - - - -
T4	- - - - -	- - - - -
Phi29	- - - - -	- - - - -
Consensus	- - - - -	- - - - -

Fig.2(continued)

			140			160
Tgo	- - - - -	- - - - -	ILD	TDY-I - - - -	- - - - -	TED
KOD1	- - - - -	- - - - -	ILD	TDY-I - - - -	- - - - -	TED
9°N	- - - - -	- - - - -	ILD	TDY-I - - - -	- - - - -	TEN
Pfu	- - - - -	- - - - -	ILD	VDY-I - - - -	- - - - -	TEE
Vent	- - - - -	- - - - -	ILD	TDY-I - - - -	- - - - -	TKD
Mma	- - - - -	- - - - -	SLID	LDY-N - - - -	- - - - -	SDD
Mac	- - - - -	- - - - -	PMDFQILD	ADYEV - - - -	- - - - -	VND
hPOLD	TEPLIFQQLE	IDHYVGPAQP			VPGGPPSRG	SVPVLRAFGV 130
ScepOLD	LYDISFQQID	AE - - - - -	QS	VLNGIKDENT	ST - VVRFFGV 142	
Pis	- - - - -	- - - - -	LD	ITYAVV - - - -	- - - - -	G
Sso	QENKIYFLQ	VDY - - - - -			DGKK	GKAVCKLFDK 72
Pae	- - - - -	- - - - -			- - - - -	Q
Eco	- - - - -	- - - - -			- - - - -	
RB69	- - - - -	- - - - -	FYLT	VEQI - - - - -	- - - - -	
T4	- - - - -	- - - - -	FYIS	IETV - - - - -	- - - - -	
Phi29	- - - - -	- - - - -			- - - - -	2
Consensus	- - - - -	- - - - -	ILD	TDY - - - - -	- - - - -	D
						GKPVIRXF - K

Fig.2(continued)

Fig.2(continued)

Fig.2(continued)

Fig.2(continued)

Fig.2(continued)

Fig. 2(continued)

Fig.2(continued)

Fig. 2(continued)

		480		483
		----- -----		----- -----
Tgo	IKRFLKVVKE	KDPDVLITYN	GNFDFAYLK	KRSEKL
KOD1	IKRFLRVVKE	KDPDVLITYN	GNFDFAYLK	KRCEKL
9 ^N	IKRFLRVVRE	KDPDVLITYN	GNFDFAYLK	KRCEEL
Pfu	IKRFLRIIRE	KDPDIIIVTYN	GDSDFFPYLA	KRAEKL
Vent	IKRFVQVKE	KDPDVIITYN	GNFDLPYLI	KRAEKL
Mma	IKRIEILKE	YD - - I IYTN	GNDFFPYLK	KRAESF
Mac	LNKFFEIICE	YDPDIVAGYN	HQDFDIPYIT	ERVKALVAKG
hPOLD	LOAWSFIRI	MDPDVITGYN	IGNFDLPYLI	SRAQTLKVQT
ScePOLD	LSNWRNFIIK	VDPDVIIGYN	TTNFDIPYLL	NRAKALKVND
Pis	VRAFVDFIRS	YDPDVIVGYN	SNGFDWPYLV	ERAKAV
Sso	LGRFFDILLI	Y - - PIVLTFN	GDDFDLPYIY	FRALKGYFP
Pae	LERLNQWLAE	HDPDAIIGWN	LVQFDLRVLH	EHAQRLLK
Eco	LEKLNAWFAN	YDPDVIIGWN	VVQFDLRMLQ	KHAERYR
RB69	LMEYLNFWQIQ	KTPVILTGWN	VESFDIPYVY	NRINKNI
T4	LMEYINLWEIQ	KRPAIFTGWN	IEGFDVPYIM	NRVKMI
Phi29	LDEFMAWVLK	VOADLY - - FH	NLKFDGAFII	NWLE - -
Consensus	LKRFLXXXXE	KDPDVIIGYN	GNFDXPPYLK	KRAEKL
	*****	*****	*****	*****

Exo II

Fig.2(continued)

	500		520
	I	I	
Tgo	-GVKFILGR-	--EPKIORM-	GDRFAVEV-- 252
KOD1	-GINFALGR-	--EPKIORM-	GDRFAVEV-- 252
9°N	-GIKFTLGR-	--EPKIORM-	GDRFAVEV-- 262
Phi	-GIKLTIGR-	--EPKMORI-	GDMTAVEV-- 252
Vent	-GVRLVLGR-	HPEPKIORM-	GDSFAVEI-- 254
Mma	-GLELKLKGR-	--KIKITKG-	GMNSKSYI-- 262
Mac	ETINSVVGR-	PIG--YRK-	GLITRTEM-- 323
hPOLD	FPF--LGRV	AGLCSNIRDS	SFQSKQTGR-- 451
ScePOLD	FPY--FGRL	KTVKQEI KES	VFSSKAYGT-- 456
Pis	-GVPLKVDRL	SN-----	GHW--SI-- 272
Sso	EEIPIDVA--	-----	GKDEAKYL-- 349
Pae	--VPLRLGR-	-----GCDE	MWREHGSR-- 271
Eco	--LPLRLGR-	-----DNSE	LEWREHGFK-- 269
RB69	-----FGES	TAKRLSPHRK	TRVKVIENMY 265
T4	-----LGER	SMKRFSPIGR	VKSKLIQNMY 262
Phi29	-----RN	GFKWSADGLP	NTYNTIISRM 107
Consensus	-GI-L-LGR-	-----DGS	--EPKIORM- GDRFAVEI--

Fig.2(continued)

Fig.2(continued)

Exo III				600	600
Tgo	AIFGQPKK-	---VYAE	IAQAW-ETGEG	L	ERVARYSMED
KOD1	AVFGQPKK-	---VYAE	ITATAW-ETGEN	L	ERVARYSMED
9 ⁿ	AVFGKPKK-	---VYAE	IAQAW-ESGEG	L	ERVARYSMED
Pfu	AIFGKPKK-	---VYADE	IAKAW-ESGEN	L	ERVAKYSMED
Vent	AVLGKTKSK-	---LGAE	IAAIW-ETESM	L	KKLAQYSMED
Mma	ALFDVKKVD-	---VGHE	NIPKMW-DNLD	-L	ETLVEYSHQD
Mac	ELLSREKLD-	---VPPL	EMEEHWND	SGDKF	RKFVDYARRD
hPOLD	HFLGEQKED-	---VQHS	ITITDLONGND	QTR	RRLAVYCLKD
SoePOLD	HFLGEQKED-	---VHYS	ISISDLONGD	SETR	RRLAVYCLKD
Pis	-YFGVMKREE	RVLI	PGHKIYEYWKD	PNK-R	PLLKRYVLDD
Sso	ALLGTSKVKV	DTLIS	FLDV-	-	EKLEYNFRD
Pae	TLLGEGKAID	NPYQRM	DEID	RMF	---AEDK
Eco	ELLGEGKSID	NPWDRM	DEID	RRF	---AEDK
RB69	FELNVGKLY	DGPISK	LR--	---	ESNH
T4	HETKKGKLPY	DGPINK	LR--	---	ETNH
Phi29	DF	-----	KLT	VLKGD	IDYHK
Consensus	ALLGXXKEK-	---VYAE	IA-AW-E-GEN	L	ERVARYSXED

Fig.2(continued)

Tgo	AKVTYELG	KEFFPME	QLSRLVGQSL	WDVSRSSSTG	640
KOD1	AKVTYELG	KEFLPME	QLSRLIGQSL	WDVSRSSSTG	350
9°N	AKVTYELG	REFFPME	QLSRLIGQSL	WDVSRSSSTG	350
Phi	AKATYELG	KEFLPME	QLSRLVGQPL	WDVSRSSSTG	350
Vent	ARATYELG	KEFFPME	ELAKLIGQSV	WDVSRSSSTG	352
Nma	AYYTORIG	EQFLPLE	MFSRVVNQSL	YDINRMSSS	358
Mac	SELALELV	LELRLLDKYI	ALAQVSGSLL	QEIVDGGQT	424
hPOLD	AYLPLRLL	ERLMVLVNAV	EMARVTGVPL	SYLLSRGQQV	553
ScePOLD	AYLPLRLM	EKLMALVNYT	EMARVTGVPF	SYLLARGQQI	558
Pis	VRSTLGLA	DKLLPF	QLSSVSGLPL	D-QVAAASVG	373
Sso	AEITLQLTTF	NNDLTMKLI	LFSRISRLGI	E-ELTRTEIS	452
Pae	CELVTRIFAR	TELLDF	ERATVTGLPA	D--RSGGSV	372
Eco	CELVTOIFHK	TEIMPF	ERATVNGLPV	D--RHGGSV	370
RB69	VYRVLQIDAK	RQFINL	DMGYAYAKIQI	QSVFSPIKTW	365
T4	VESVQAIDKI	RGFIDL	SMSYYAKMPF	SGVMSPIKTW	362
Phi29	EEYAY- IKND	IQIIAEALLI	QFK--QGL	DRMTAGSDSL	195
Consensus	AELTXELG	KEFLPXE	QLSRVXGQPL	WDVSRSSSTG	

Fig.2(continued)

Tgo	NLVEWFLLRK	AYERNELAPN	KPERELARR	--RES--	383
KOD1	NLVEWFLLRK	AYERNELAPN	KPERELARR	--RQS--	383
9°N	NLVEWFLLRK	AYERNELAPN	KPERELARR	--RGG--	383
Pfu	NLVEWFLLRK	AYERNEVAPN	KPSEEEYQRR	--LRES--	384
Vent	NLVEWYLLRV	AYARNELAPN	KPDEEEYKRR	--LRTT--	386
Mma	QMVEYLLLN	SYKMGVAPN	RPSGKEYQKR	--IRSS--	392
Mac	SMVETLLRE	FGLKDRVILP	KPGDELSAER	YDMSSD--	460
hPOLD	KVVSQ-LLRQ	AMHEGLMPV	VKSEGG--	--ED--	580
ScxPOLD	KVVSQ-LFRK	CLEIDTVIPN	MQSQAS--	--DDQ--	586
Pis	NRVEWMLLR	AYRLGEVAPN	R-EEREY--	--EP--	401
Sso	TWVKNLYYWE	HRKRNLIPN	K--EELAKS	SNIRTSALIK	490
Pae	AAFTHLYMPL	MHRAGFVAPN	LGEKRPEAS-	--	401
Eco	AAFCHLYFPR	MHRAGYVAPN	LGEVPPHAS-	--	399
RB69	DAI--IFNS	LKEQNKVIPQ	GRSHPVQP--	--	390
T4	DAI--IFNS	LKGEHKVIPQ	QGSHVKQS--	--	387
Phi29	KGFKDITTK	KFKKVFPPTS	LGLDKEV--	--	222
Consensus	NLVEWLLLRK	AYERNEVAPN	KPSEXEXA--	--R--	--

Fig.2(continued)

Fig.2(continued)

			740		760
			I		I
Tgo	ITHNVSPDYL	-NREGCEEY-	-DVAQ-	-V-	-GHK 440
KOD1	ITHNVSPDTL	-NREGCKEY-	-DVAQ-	-V-	-GHR 440
gN	ITHNVSPDTL	-NREGCKEY-	-DVAPE-	-V-	-GHK 440
Pfu	ITHNVSPDYL	-NLEGCKNY-	-DIAPQ-	-V-	-GHK 441
Vent	IVTHNVSPDTL	-EKEGCKNY-	-DVAPI-	-V-	-GYR 443
Mma	MSHNLSPETI	-DCTCCSDE-	-ENGINE	EIL	-GHK 452
Mec	MAHNLCYTTV	VTRDRPDGK-	-TIKPPS	-	-GGE 518
hpOLD	MAHNLCYTTL	LRPGTAQKL-	-GLTEDQ	-FIRTPTGDE	645
ScePOLD	MAHNLCYTTL	CNKATVERL-	-NLKIDE	DYVITPNGDY	652
Pis	MKYNLSPDYI	LEPGEPD--	-PPEG	VNVAPEVGR	462
Sso	RTWNLSYETV	DIQQCKKPY-	-EVKDET	GEVL	-HI 554
Pae	RTFLIDPVGL	-VEGL-	-RQPDDE	HSVEGFRGAR	460
Eco	RTFLIDPVGL	-VEGM-	-AQPDPE	HSTEGFLDAW	458
RB69	RQVNI SPETI	AGTFKVAPLH	DYINAVAERP	SDVYSCSPNG	460
T4	RQVNI SPETI	RGQFKVHPIH	EYIAGTAPKP	SDEYSCSPNG	457
Phi29	YSRLLPYG--	-EPIV	FEGKYVWDED	YPLH	-IQHI 288
Consensus	XTHNLSPDYTL	-NREGCXPY-	-DVAPE-	-V-	-GHX

Fig.2(continued)

		760	800
Tgo	FC - - KDFPGF	IPSLL - - GD	LLEERQKVKK - - KM - - - 467
KOD1	FC - - KDFPGF	IPSLL - - GD	LLEERQKIKK - - KM - - - 467
9°N	FC - - KDFPGF	IPSLL - - GD	LLEERQKIKR - - KM - - - 467
Pfu	FC - - KDIPGF	IPSLL - - GH	LLEERQKIKT - - KM - - - 468
Vent	FC - - KDFPGF	IPSIL - - GD	L I AMRQDIKK - - KM - - - 470
Mma	FC - - KKSIGI	IPKTL - - MD	L INRRKKVKK - - VL - - - 479
Mac	FVPPEVFRGI	VPSIL - - ED	LNKRGDTKK - - RM - - - 547
hPOLD	FVKTSVRKGL	LPQIL - - EN	LLSARKRAKA - - EL - - - 674
ScePOLD	FVTTKRRRGI	LPIIL - - DE	L I SARKRAKK - - DL - - - 681
Pis	F - - RRSPPGF	VPQVL - - KS	LVELRKAVRE - - EA - - - 489
Sso	VC - - MDRPGI	TAVIT - - GL	LRDFRVKIYK - - - - - 579
Pae	FSRTRH - - C	LPAIV - - AR	VWEGREAAKR - - ER - - - 486
Eco	FSREKH - - C	LPEIV - - TN	IWHGRDEAKR - - QG - - - 484
RB69	MMYYKDRDGV	VPTEI - - TK	VFNQRKEHKG - - YMLAAQR 494
T4	WMYDKHQEGI	IPKEI - - AK	VFFQRKDWKK - - KMFAEEM 491
Phi29	RCEFELKEGY	IPTIQIKRSR	FYKGN EY LKS SGGE IADLWL 328
Consensus	FC - - KDFPGF	IPSIL - - GD	LLEERKKIKK - - KM - - -

Fig.2(continued)

Fig.2(continued)

Motif B

Fig.2(continued)

Tgo	ARWYCKECAE	SVTAWG-RQY	IETTIREIEE	KFG	320
KOD1	ARWYCKECAE	SVTAWG-REY	ITMTIKEIEE	KYG	533
9 ^N	ARWYCKECAE	SVTAWG-REY	IEMVIRELEE	KFG	533
Pfu	ARWYCKECAE	SVTAWG-RKY	IELVWKELEE	KFG	534
Vent	ARWYCKECAE	SVTAWG-RHY	IEMTIREIEE	KFG	536
Mma	ARWYSRDCAE	ITTHLG-RQY	IQKTIEEAEN	-FG	548
Mac	ARLYSLTLAN	AVTSFG-RSN	ILNTRDLING	RIGKIVLRNS	620
hPOLD	GKLPCL EISQ	SVTGFG-RQM	IEKTKQLVES	KY	739
ScePOLD	GKLPCL AISS	SVTAYG-RTM	ILKTKTAVQE	KY	746
Pis	ARWYKREVAE	SVTAF A-RAI	LKD VIEQARR	-	553
Sso	FPLYAPAVAE	SVTALG-RYV	ITSTVKKARE	E	647
Pae	CRFFDPRLAS	SITLRG-HRI	MRRTRELIEA	E	539
Eco	CRFFDPRLAS	SITMRG-HQI	MRQTKALIEA	Q	537
RB69	FRYYDLRNAT	AITTFG-QMA	LQWIERK VNE	YLN EVC GTEG	613
T4	FRYYDLRNAT	AITIFG-QVG	IQWIARKINE	YLNKVC GTND	610
Phi29	DVTGKVPYLK	ENGALGFRLG	EEETKDPVYT	PMGVF ITAWA	437
Consensus	ARWYCKECAE	SVTAXG-RQY	IEXTIREIEE	KFG	-

Fig.2(continued)

Fig.2(continued)

				980	1,000
				I	I
Tgo	- - - - -	ADAE	TVKK	- - - - - K	AKEFLDYINA
KOI1	- - - - -	ADAE	TVKK	- - - - - K	AMEFLKYINA
9*N	- - - - -	ADAE	TVKK	- - - - - K	AKEFLKYINP
Pfu	- - - - -	GESE	EIKK	- - - - - K	ALEFVKYINS
Vent	- - - - -	EKPE	LIK	- - - - - K	AKEFLNYINS
Mma	- - - - -	DDKE	KLKSKYELLEK	- - - - -	TREFLKNINN
Mac	- - - - -	KGDL	SLEEVS	- - - - -	RLS - - EIVSA
hPOLD	- - - - -	SSVA	EAMAL	- - - - -	GREAADWVSG
ScePOLD	- - - - -	TDLK	EAMD	- - - - -	GTEAAKYVST
Pis	- - - - -	D - - -	- - - - -	- - - - -	VDKLIKYYEE
Sso	- - - - -	KNSL	E - - - -	- - - - -	- - NIIKWVKT
Pae	- - - - -	PRAE	EEAAAI	- - - - -	GRALVARVND
Eco	- - - - -	AHSE	EEAAKI	- - - - -	GRALVQHVNA
RB69	- - - - -	VGESKFRDTN	HWVDFLDKFA	- - - - -	RERMEPAIDR
T4	- - - - -	VGLDRFKEQN	DLVEFMNQFG	- - - - -	KKKMEPMIDV
Phi29	- - - - -	- - - - -	- - - - -	- - - - -	GTEIPDVIKD
Consensus	- - - - -	ADAE	EXKK	- - - - -	XXEFLKYINA

Fig.2(continued)

27/46

			1,020		1,040
			I		I
Tgo	KLPGLLELEY	EGFYKRGFF-	- - - - -	V-TK	KKYAV-IDE- 599
KOD1	KLPGALELEY	EGFYVERGFF-	- - - - -	V-TK	KKYAV-IDE- 599
9 ^N	KLPGLLELEY	EGFYVRGFF-	- - - - -	V-TK	KKYAV-IDE- 599
Pfu	KLPGLLELEY	EGFYKRGFF-	- - - - -	V-TK	KRYAV-IDE- 600
Vent	KLPGLLELEY	EGFYLRGFF-	- - - - -	V-TK	KRYAV-IDE- 602
Mma	TLPGEMELEY	EGYFKRGIF-	- - - - -	V-TK	KKYAL-IDE- 618
Mac	SLPDPMELF	ESVAKRALL-	- - - - -	I-AK	KRYALWLFEP 710
hPOLD	HFPSPIRLEF	EKVYFPYLL-	- - - - -	I-SK	KRYAGLLFSS 816
ScePOLD	LFKHPINLEF	EKAYFPYLL-	- - - - -	I-NK	KRYAGL-FWT 822
Pis	KYG--IDIKV	DKDYAKVLF-	- - - - -	TEAK	KRYAGLL-- 611
Sso	TFN--LDLEV	DKTYKFAF-	- - - - -	SGLK	KNYFGVYQ-- 707
Pae	GLDSALELOF	ETHYRRFLMP	TVRGAEESK	KRYAGLVRRA	627
Eco	RLTSALELEY	ETHFCRFLMP	TIRGADTGSK	KRYAGLIQEG	624
RB69	NKQHLMFMDR	EAIAGPPLGS	KGIGGFWTGK	KRYALNVWDM	715
T4	NREHLMHMDR	EAI SCPPLGS	KGVGGFWKAK	KRYALNVYDM	712
Phi29	- - - - -	- - - - -	- - - - -	I VDPK	K- - - - - 479
Consensus	KLPGLLELEY	EGFYKRGLF-	- - - - -	V-TK	KRYAG-IDE-

Fig.2(continued)

	1,080	1,080	
Tgo	- - - - - EDKI	TTRGLEIVRR	DWSEIAKETQ ARVLEAILK - 632
KOD1	- - - - - EGKI	TTRGLEIVRR	DWSEIAKETQ ARVLEAILK - 632
9°N	- - - - - EGKI	TTRGLEIVRR	DWSEIAKETQ ARVLEAILK - 632
Pfu	- - - - - EGKV	TTRGLEIVRR	DWSEIAKETQ ARVLEAILK - 633
Vent	- - - - - EGR	TTRGLEIVRR	DWSEIAKETQ AKVLEAILK - 635
Nma	- - - - - NEKI	TVKGLEIVRR	DWSNVSKNTQ KNVLNALLK - 651
Mac	RNSGW - ENKI	KVKGMETVRR	DWCELTSITL NRVLFEVLI - 748
hPOLD	RPDAH - D - RM	DCKGLEAVRR	DNCPLVANLV TASLRRLI - 853
ScePOLD	NPDKF - D - KL	DQKGLASVRR	DSCSLVSI VM NKVLKKIL - 859
Pis	- - - - - R - DGR	DIVGFEVVRG	DWSELAKDVQ LRVIEIILK - 845
Sso	- - - - - DGKV	DIKGMLVKKR	NTPEFVKKVF NEVKELMISI 741
Pae	DG - - - - GEEM	VFKGLETVRT	DWSPLAQRFO QELYLRIFNR 653
Eco	DK - - - - - QRM	VFKGLETVRT	DWTPLAQQFQ QELYLRIFNR 659
RB69	EGTRYAEPKL	KIMGLETQKS	STPKAVQKAL KECIRML - - 753
T4	EDKRFAEPHL	KIMGMETQQS	STPKAVQEAL EESIRRL - - 750
Phi29	- - - - -	- - LGYWAHES	TFKRAKYLRQ KTYIQDIYMK 507
Consensus	- - - - - EGKI	TTKGGLETVRR	DWSELAKETQ ARVLEXILK -

Fig. 2(continued)

			1,100		1,120
Tgo	--HGDVEEA-	--VRIVKEV	TEKLSKYEVP	P----	-----EKL V 661
KOD1	--DGDVEKA-	--VRIVKEV	TEKLSKYEVP	P----	-----EKL V 661
9"N	--HGDVEEA-	--VRIVKEV	TEKLSKYEVP	P----	-----EKL V 661
Pfu	--HGDVEEA-	--VRIVKEV	IQKLANYEIP	P----	-----EKL A 662
Vent	--EGSVEKA-	--VEVVRDV	VEKIAKYRVP	L----	-----EKL V 664
Mma	--EGSVENA-	--KKVIQDT	IKELKDGVN	N----	-----EDLL 680
Mac	--EGDVKKA-	--VEHVRKV	VSDVRNLDPG	KDAGI	IEKL V 782
hPOLD	--DRDPEGA-	--VAHAQDV	ISDLLCNRID	-----	ISQL V 882
ScePOLD	--ERNVDGA-	--LAFVRET	INDILHNRVD	-----	ISKL I 888
Pis	--SRDIVEAR	HGVIKYIREI	IERLKNYKFN	-----	IDDL I 678
Sso	NSPNDVKEIK	RKIVDVVKGS	VEKLKNKGYN	-----	LDEL A 776
Pae	QPYQD-----	-----YVRDY	VRRTLAGELD	-----	DLLV 687
Eco	EPYQE-----	-----YVRET	IDKLMAGELD	-----	ARLV 683
RB69	-----QEGE	ESLQEFKFEF	EKEFRQLNY-	-----	ISI 779
T4	-----QEGE	ESVQEYYKNF	EKEYRQLDY-	-----	KVI 776
Phi29	EVDGKLVEGS	PDDYTDIKFS	VK-----	-CAGMTDK--	536
Consensus	--EGDVEEA-	--VXYVKEV	IEKLXXYEVP	-----	-----EKL V

Fig.2(continued)

	1,140		1,160
	I		I
Tgo	IEQITRDLK	DYKATG----	--P-HVAVAK
KOO1	IEQITRDLK	DYKATG----	RL-----AAR-689
9"N	IEQITRDLR	DYKATG----	RL-----AAR-689
Pfu	IEQITRPLH	EYKAIG----	RL-----AAR-689
Vent	IEQITRDLK	DYKAIG----	KL-----AAK-690
Mma	HTQLTKRIE	DYKTTA----	RL-----AAR-692
Mac	LTRTLTRKAD	SYKNKQ----	KL-----LKS-708
hPOLD	ITKELTRAAS	DYAGKQ----	NL-----KKRT811
ScePOLD	ISKTL---AP	NYTNPQ----	RM-----RKRD911
Pis	IWKTLCKELD	EYKAYP----	RM-----KRRE914
Sso	FKVMLSKPLD	AYKKNT----	IL-----KRH-706
Pae	YRKRLRRRLD	DYQRNV----	QL-----RP804
Eco	YRKRLRRPLS	EYQRNV----	IADYNLERG721
RB69	ASVSSANNIA	KYDVGGFPGP	LADDEENQKRG717
T4	AEVKTANDIA	KYDDKGWPGF	TYNRAIKGNI819
Phi29	IKKEVT--FE	NFK-VGFSRK	TYRRAYSGLG816
Consensus	HKQLTRDLD	DYKATG----	-----561
			RL-----AAR-

Fig.2(continued)

			1,180		1,200
Tgo	- GIKIRPGTV	ISYIVLKGSG	RIG--DRAIP	FDEFDPAKHK	726
KOD1	- GVKIRPGTV	ISYIVLKGSG	RIG--DRAIP	FDEFDPTKHK	726
9 ⁿ N	- GVKIRPGTV	ISYIVLKGSG	RIG--DRAIP	ADEFDPTKHR	726
Pfu	- GVKIKPGMV	IGYIVLRGDS	PIS--NRAIL	AEEYDPKKHK	727
Vent	- GIKVKPGTI	ISYIVLKGSG	KIS--DRVIL	LTEYDPRKKH	729
Mma	- GNRVNTGDV	ISYIITSGNK	SIS--ERA--	--EILENAKN	741
Mac	- GIMPSIGTR	IPFVITAGKG	LFV--DRAED	PDYVRENNVP	848
hPOLD	PGSAPSLGDR	VPYVIIISAAK	GVAAYMKSED	PLFVLEHSLP	951
ScsPOLD	-GVGPNVGDR	VDYVIIIGND	KL--YNRAED	PLFVLENNIQ	951
Pis	-GYRVGKGT	IGYVIVKGE	KVS--ERALP	YILLDDIK-K	742
Seo	FGVNVLPRI	IYVVKVRSKD	GVKPVQLA--	-----KVTE	836
Pae	RPRQYQSGGW	ISYVISVAG-	-----	PEPLEARRSA	750
Eco	RPLQYQNRGT	IKYVWTTNG-	-----	PEPLDYQRSP	746
RB69	DAPOVVEGEK	VYVLPPLREGN	PFGDKCIAWP	SGTEITDLIK	859
T4	VAP-ILDGNK	VMVLPPLREGN	PFGDKCIAWP	SGTELPKEIR	855
Phi29	-----PGGV	VL-----	-----	-----	567
Consensus	-GVKXRPGTV	ISYVILKGGG	XIG--DRAIP	PDEXDPXKHK	

Fig.2(continued)

				1,220				1,240
Tgo	YDAEYYIENQ	VL--PAVERI	LRAF----					748
KOD1	YDAEYYIENQ	VL--PAVERI	LRAF----					748
g ⁿ N	YDAEYYIENQ	VL--PAVERI	LKAF----					748
Pfu	YDAEYYIENQ	VL--PAVLRI	LEGF----					749
Vent	YDPDYYIENQ	VL--PAVLRI	LEAF----					751
Mma	YDTNYYIENQ	IL--PPVIRL	MEAL----					763
Mac	IDVDYYVKKQ	IL--PPVERI	LEVF----					870
hPOLD	IDTQYYLEQQ	LA--KPLRLI	FEPILGEGRA	EAVLLRGDHT	989			
ScePOLD	VDSRYYLTNQ	LQ--NPIISI	VAPIIGDKQA	NGMFV----	V 985			
Pis	IDIDYYIERQ	II--PAALRI	AEVI----					764
Sso	IDAEKYLE-A	LR--STFEQI	LRAF----					857
Pae	IDYEHYVGKQ	LQ--PVADAI	L-PFVGDDFA	TLV----				780
Eco	LDYEHYLTRO	LQ--PVAEGI	L-PFIEDNFA	TLM----				776
RB69	DDVLHWMDYT	VLLEKTFIKP	LEGFTSAAKL	DY----				891
T4	SDVLSWIDHS	TLFQKSFVKP	LAGMCESAGM	DY----				887
Phi29	VDDTFTIK--	-----	-----	-----				576
Consensus	YDAEYYIENQ	VL--PAVERI	LEAF----					

Fig.2(continued)

Fig.2(continued)

Fig.2(continued)

Fig.2(continued)

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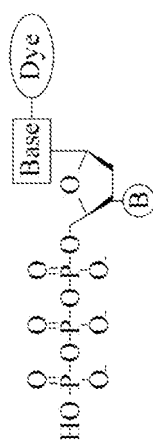


Fig.3

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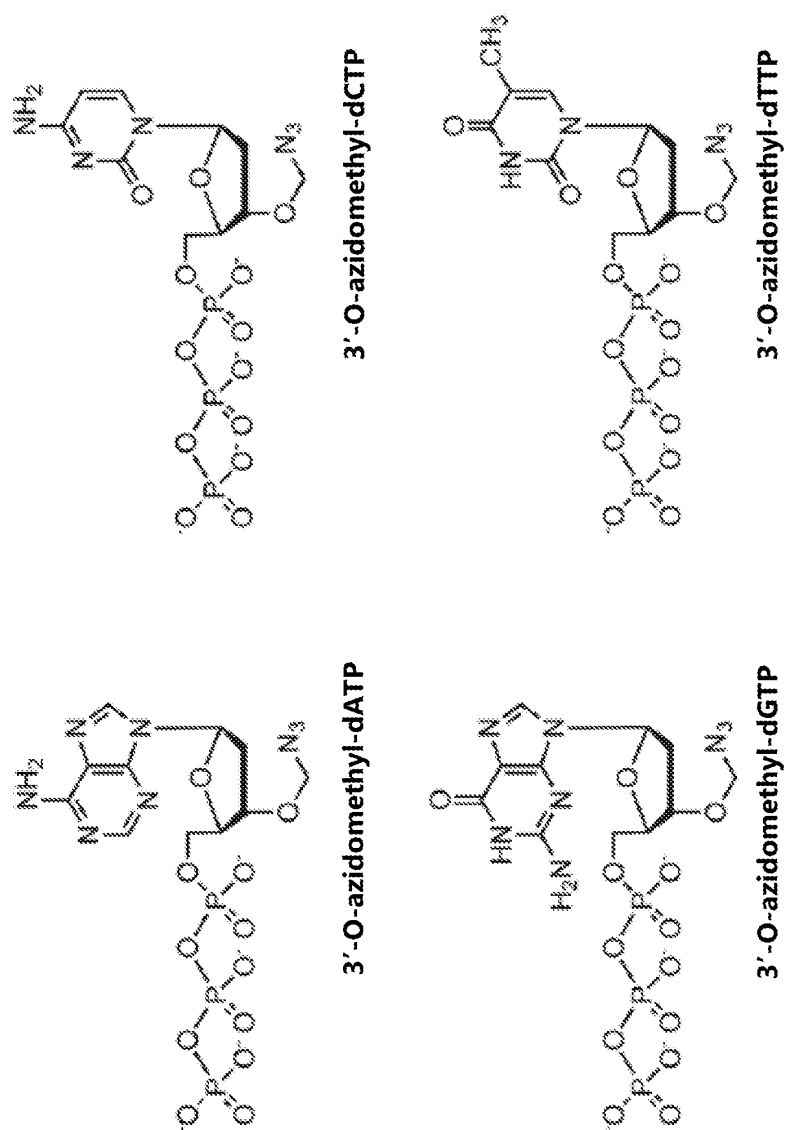


Fig.4

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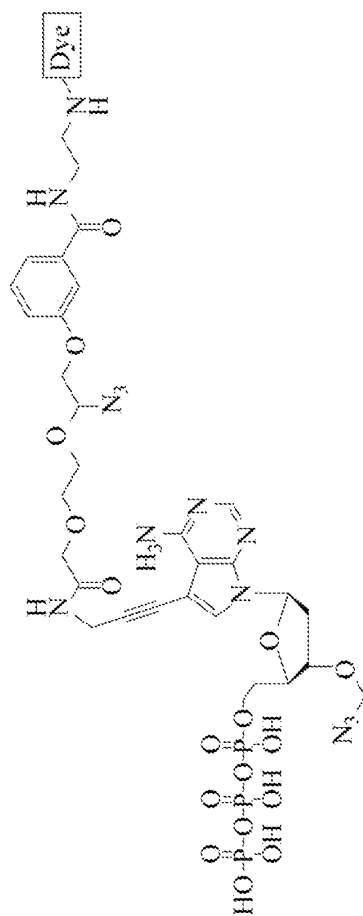


Fig.5A

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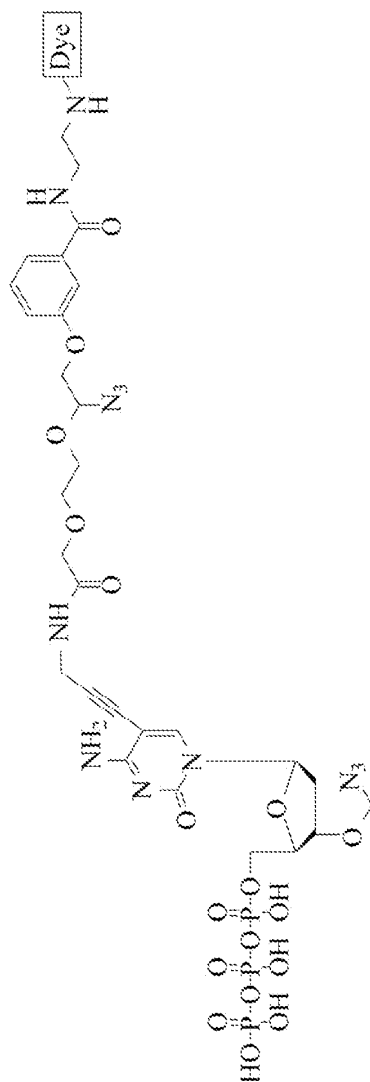


Fig.5B

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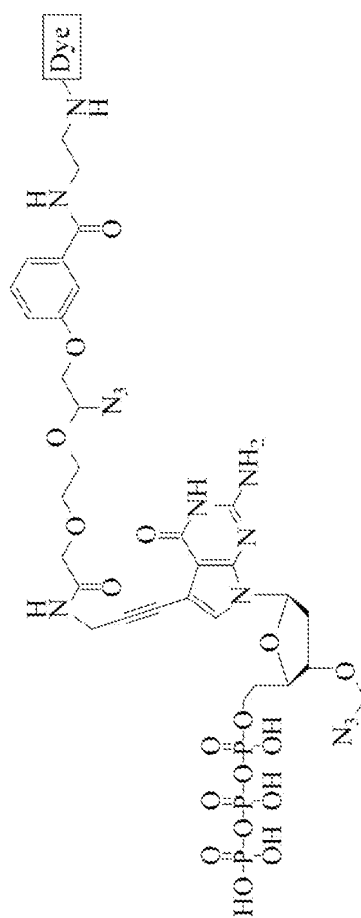


Fig.5C

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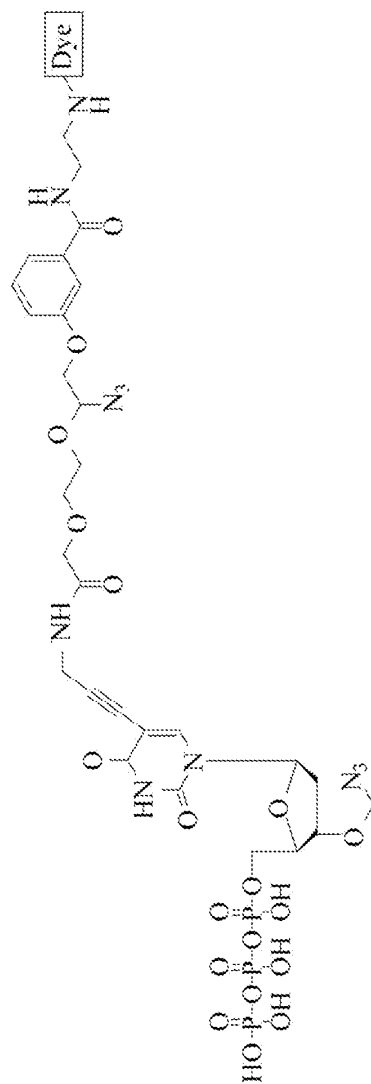


Fig.5D

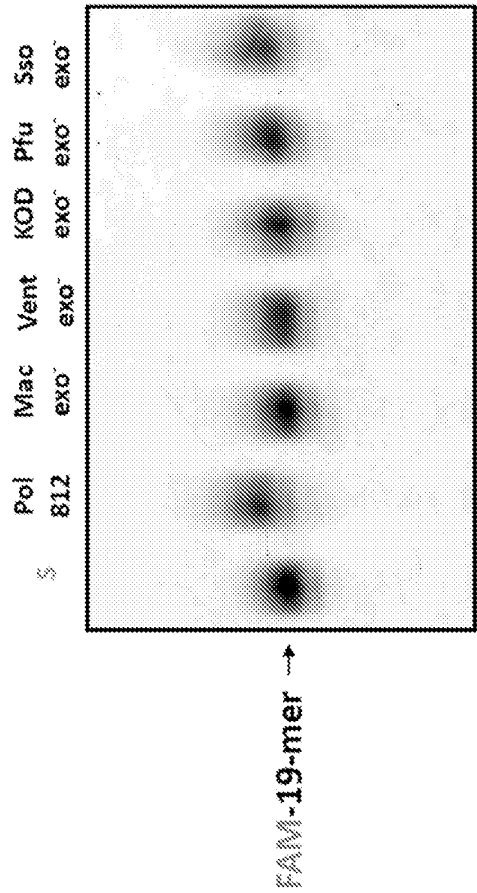


Fig.6

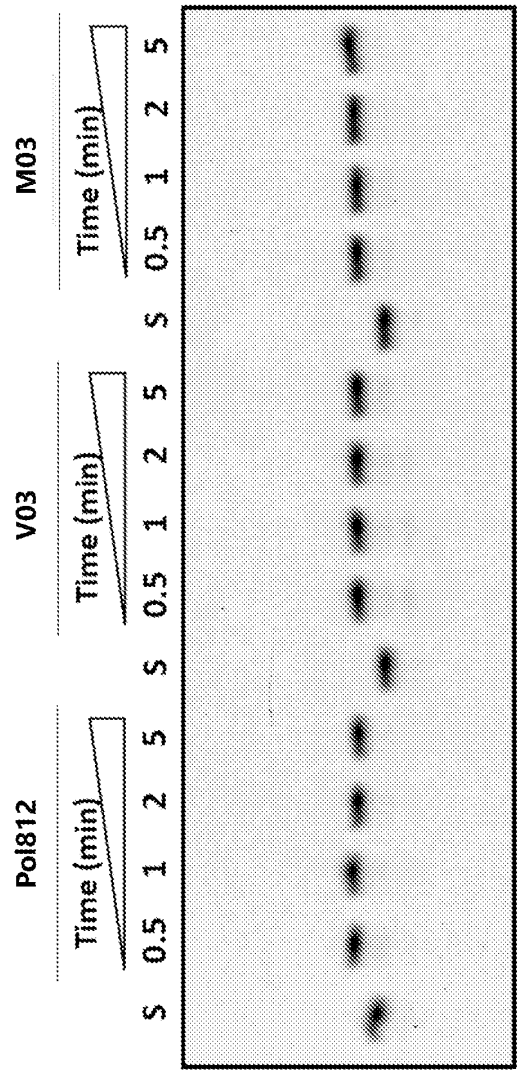


Fig.7

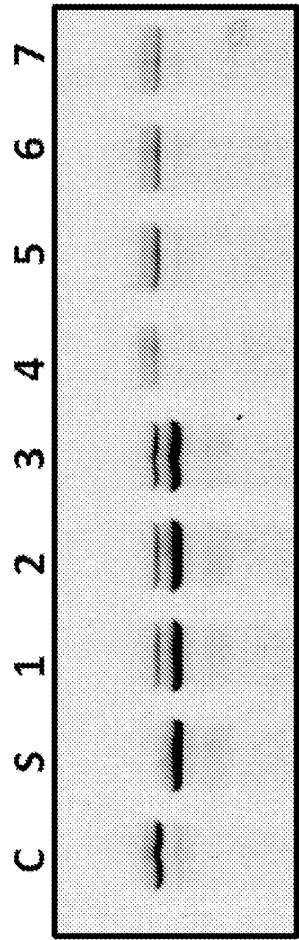


Fig.8

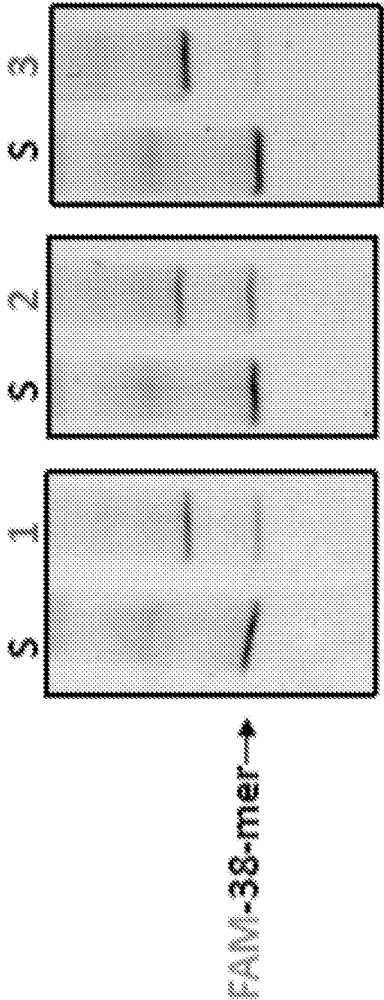


Fig.9

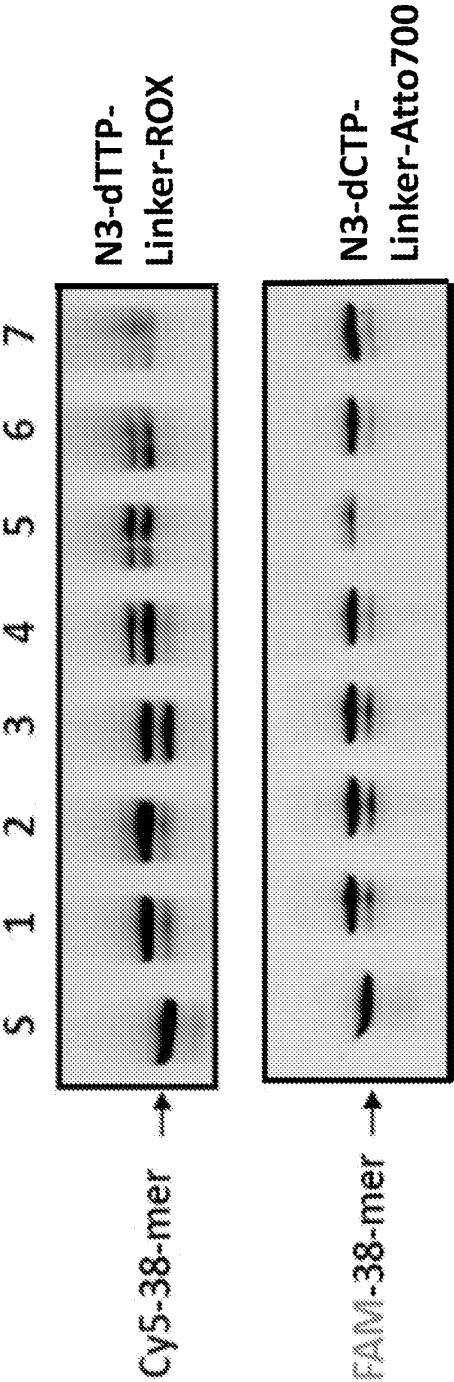


Fig. 10