

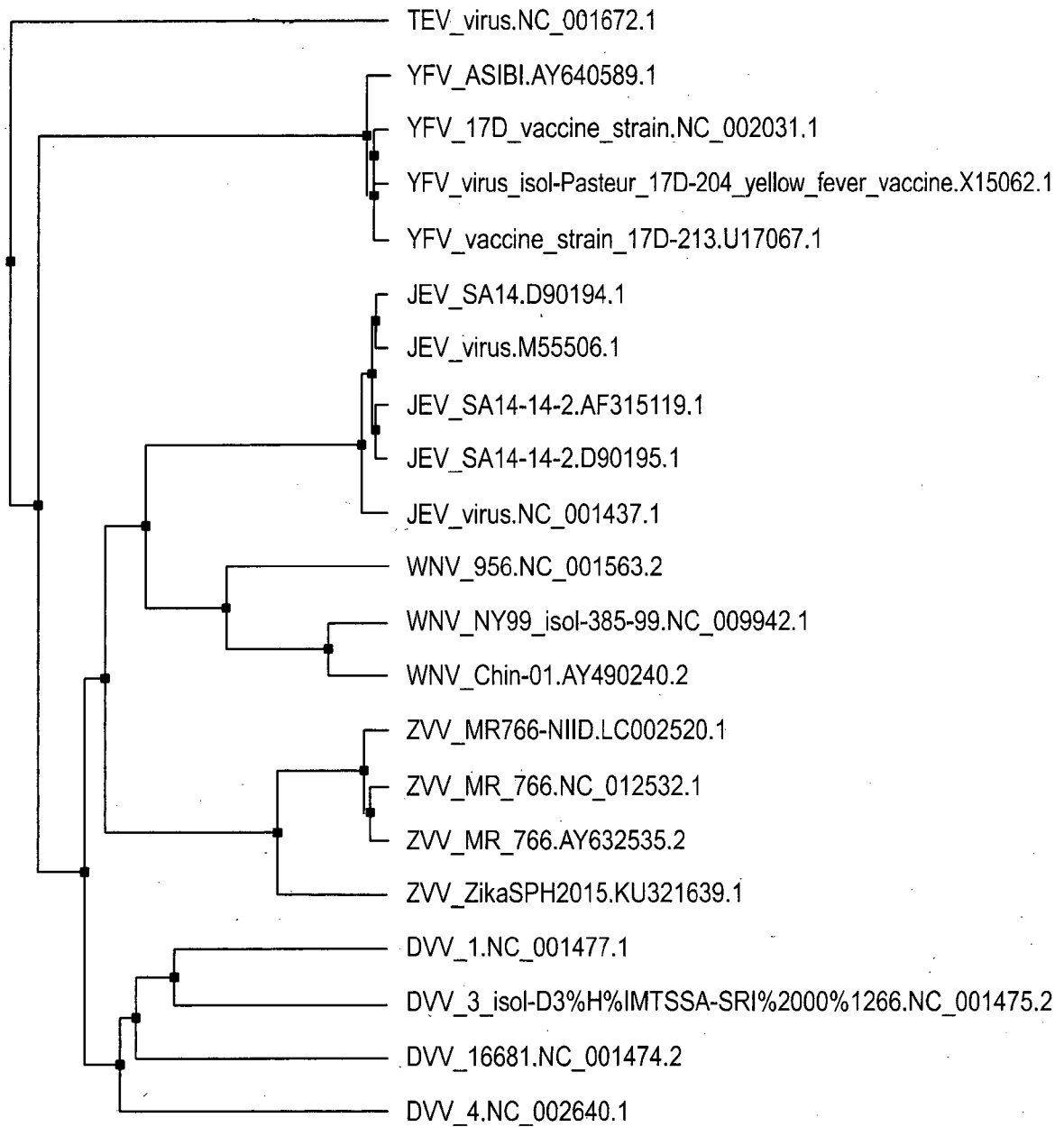


Figure 1

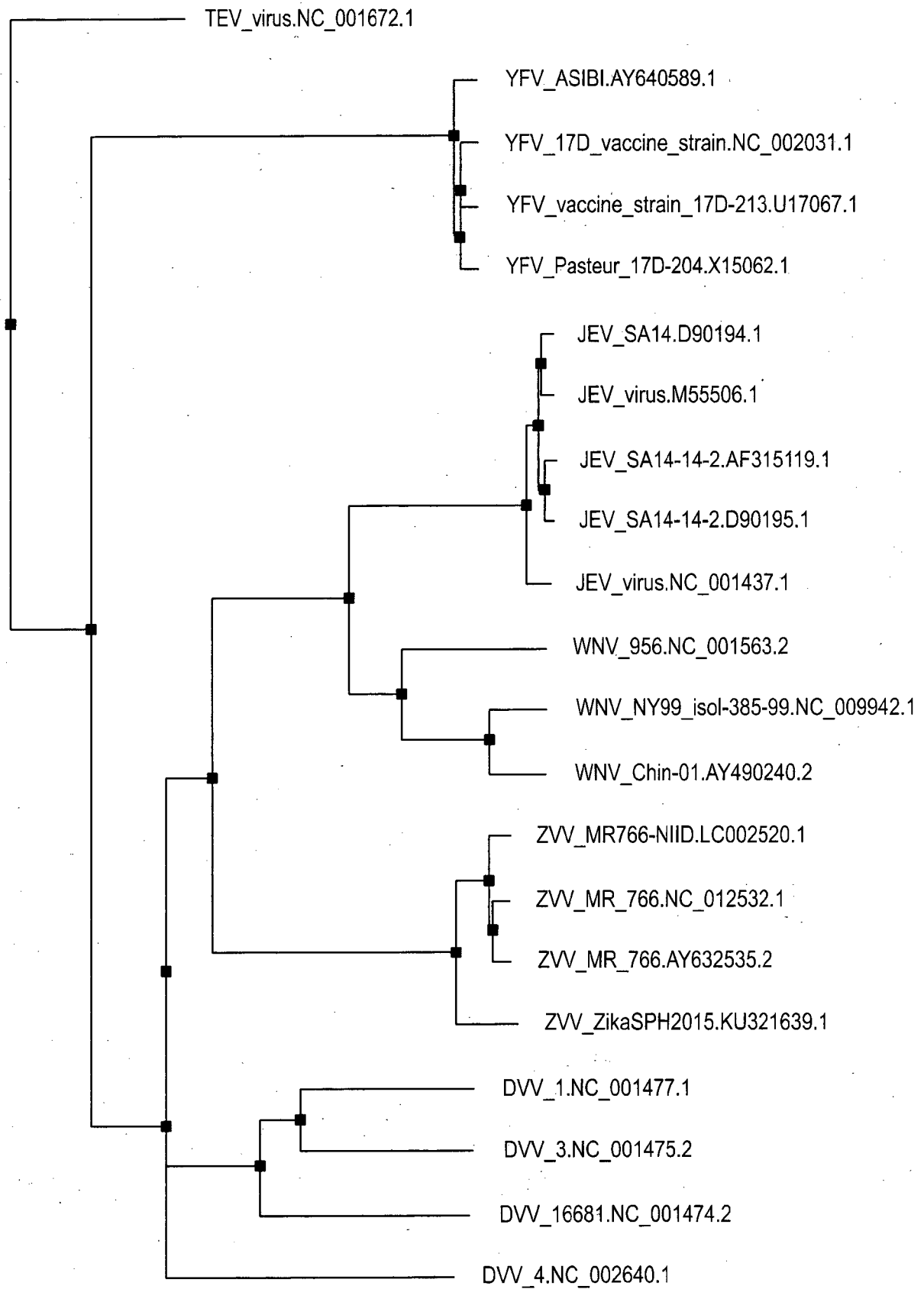


Figure 2

DW 1.NC 001477.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DW 1681.NC 001474.2	1	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
DW 3.NC 001475.2	2	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
DW 4.NC 002640.1	3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
JEV SA14-14-2.AF315119.1	4	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
JEV SA14-14-2.D90195.1	5	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
JEV SA14.D90194.1	6	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
JEV virus.M55506.1	7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
JEV virus.NC 001437.1	8	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
TEV virus.NC 001672.1	9	55.8	54.9	55.8	55.4	56.5	56.6	56.6	56.7	56.6	56.2	56.7	56.6	56.9	57.0	57.0	57.0	56.6	56.7	56.7	56.7
WNV 956.NC 001563.2	10	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
WNV Chin-01.AY490240.2	11	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
WNV NY99 isol-385-99.NC 009942.1	12	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
YFV 17D vaccine strain.NC 002031.1	13	58.0	58.3	57.5	58.0	57.9	58.0	58.0	58.0	58.3	56.9	58.1	58.2	57.8	58.0	58.4	58.3	58.5	58.5	58.5	58.2
YFV ASIB.AY640589.1	14	57.9	58.3	57.6	57.9	58.0	58.0	58.0	58.1	58.3	57.0	58.0	58.2	57.8	58.0	58.4	58.4	58.4	58.4	58.4	58.1
YFV Pasteur 17D-204.X15062.1	15	57.9	58.3	57.5	57.9	58.0	57.9	58.0	58.0	58.4	57.0	58.1	58.2	57.8	58.0	58.4	58.4	58.4	58.4	58.4	58.2
YFV vaccine strain 17D-213.U17067.1	16	58.0	58.3	57.5	57.9	58.0	58.0	58.0	58.1	58.3	57.0	58.2	57.8	58.0	58.4	58.4	58.4	58.4	58.4	58.4	58.1
ZW MR766-NIID.LC002520.1	17	62.3	62.7	62.6	62.1	61.9	61.9	61.9	62.1	62.1	62.4	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
ZW MR 766.AY632535.2	18	62.3	62.8	62.7	62.0	61.8	61.8	61.8	62.0	62.0	62.3	62.1	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
ZW MR 766.NC 012532.1	19	62.3	62.8	62.7	62.0	61.8	61.8	61.8	62.0	62.0	62.3	62.1	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
ZW ZikaSPH2015.KU321639.1	20	61.3	62.2	62.5	62.1	61.4	61.5	61.6	61.7	61.7	62.2	62.7	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4

 % Identity and higher
 % Identity and higher
 % Identity and higher

Figure 3

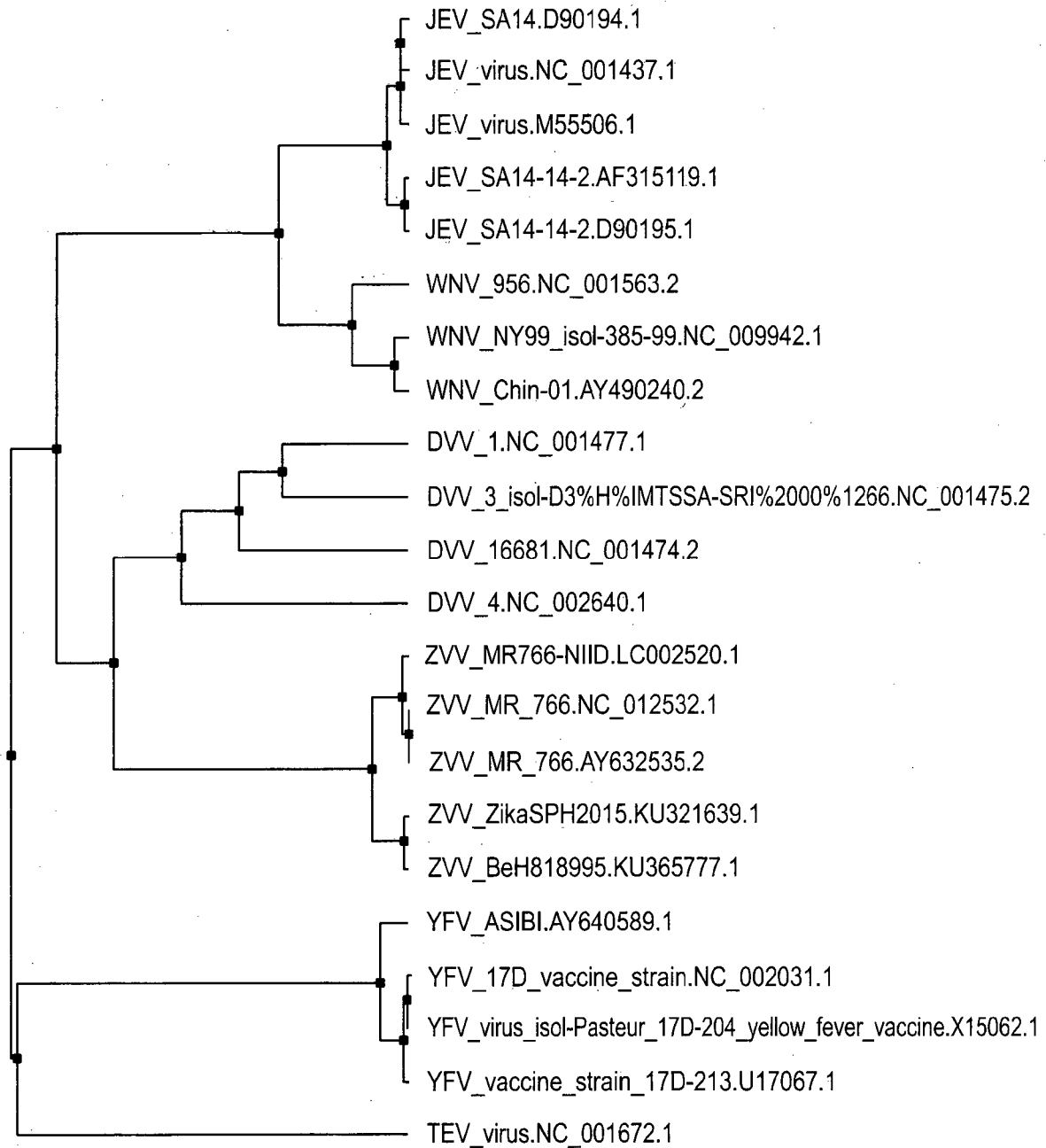


Figure 4

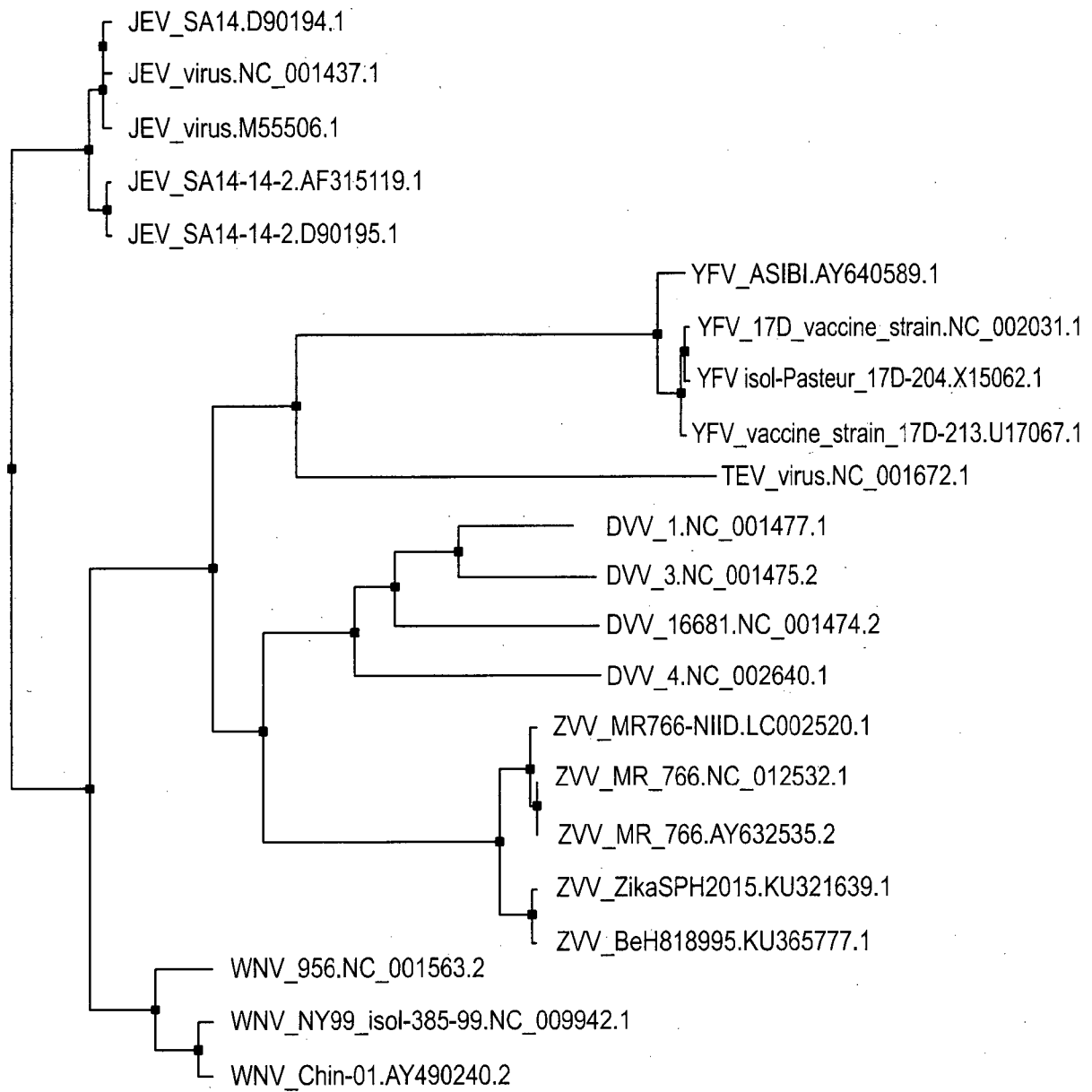


Figure 5

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
DVV 1.NC 001477.1	0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
DVV 16681.NC 001474.2	1	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
DVV 3.NC 001475.2	2	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
DVV 4.NC 002640.1	3	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
JEV SA14-14-2.AF315119.1	4	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
JEV SA14-14-2.D90195.1	5	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
JEV SA14.D90194.1	6	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
JEV virus.M55506.1	7	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
JEV virus.NC 001437.1	8	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
TEV virus.NC 001672.1	9	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
WNV 956.NC 001563.2	10	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
WNV Chin-01.AV490240.2	11	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
WNV NY99 isol-385-99.NC 009942.1	12	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
WNV NY99 vaccine strain.NC 002031.1	13	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
YFV ASIB AY640589.1	14	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
YFV isol-Pasteur 17D-204.X15062.1	15	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
YFV vaccine strain 17D-213.U17067.1	16	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
ZVBeH818995.KU365777.1	17	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
ZV MR766-NIID.LC002520.1	18	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
ZV MR 766.AY632535.2	19	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
ZV MR 766.NC 012532.1	20	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
ZV ZikaSPH2015.KU321639.1	21	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0

 50 % Identity and higher
 60 % Identity and higher
 70 % Identity and higher

Figure 6

292 AH	IGITDR	IEVH	IGTWSAT	IOCK	VNAPOK	SLI	SLETVADGP	BEA	KV	YN	VL	THVK	INDK	ST	EAHLA	EEGDN	AE	KRTYS	SGGL	IG	SIVA	AKFT	411																						
292 AH	IGITDR	IEVH	IGTWSAT	IOCK	VNAPOK	SLI	SLETVADRP	EV	KV	YN	VL	THVK	INDK	ST	EAHLA	EEGDN	AE	KRTYS	SGGL	IG	SIVA	AKFT	411																						
292 AH	IGITDR	IEVH	IGTWSAT	IOCK	VNAPOK	SLI	SLETVADRP	EV	KV	YN	VL	THVK	INDK	ST	EAHLA	EEGDN	AE	KRTYS	SGGL	IG	SIVA	AKFT	411																						
292 AH	IGITDR	IEVH	IGTWSAT	IOCK	VNAPOK	SLI	SLETVADRP	EV	KV	YN	VL	THVK	INDK	ST	EAHLA	EEGDN	AE	KRTYS	SGGL	IG	SIVA	AKFT	411																						
307 FN	LGMDRI	IEAS	ATWDLV	GDSE	INAND	TL	VRMINIEASOL	EV	SY	YH	SVTD	ISTVAR	IT	EAHNE	KRADSSYV	KQGF	TR	SGGL	IG	SIDT	AKFS	426																							
307 FN	LGMDRI	IEAS	ATWDLV	GDSE	INAND	TL	VRMINIEASOL	EV	SY	YH	SVTD	ISTVAR	IT	EAHNE	KRADSSYV	KQGF	TR	SGGL	IG	SIDT	AKFS	426																							
307 FN	LGMDRI	IEAS	ATWDLV	GDSE	INAND	TL	VRMINIEASOL	EV	SY	YH	SVTD	ISTVAR	IT	EAHNE	KRADSSYV	KQGF	TR	SGGL	IG	SIDT	AKFS	426																							
307 FN	LGMDRI	IEAS	ATWDLV	GDSE	INAND	TL	VRMINIEASOL	EV	SY	YH	SVTD	ISTVAR	IT	EAHNE	KRADSSYV	KQGF	TR	SGGL	IG	SIDT	AKFS	426																							
307 FN	LGMDRI	IEAS	ATWDLV	GDSE	INAND	TL	VRMINIEASOL	EV	SY	YH	SVTD	ISTVAR	IT	EAHNE	KRADSSYV	KQGF	TR	SGGL	IG	SIDT	AKFS	426																							
294 MR	VGMDRI	IEAS	ATWDLV	HGSE	TMKQD	TL	FEIKTEAQP	TL	KY	IE	KL	INITTSR	TP	EP	SLNEEQDQRF	EH	SNV	RGH	GL	SLT	IT	AKFS	432																						
287 MR	VGMDRI	IEAS	ATWDLV	HGSE	TMKQD	TL	FEIKTEAQP	TL	KY	IE	KL	INITTSR	TP	EP	SLNEEQDQRF	EH	SNV	RGH	GL	SLT	IT	AKFS	432																						
313 MR	VGMDRI	IEAS	ATWDLV	HGSE	TMKQD	TL	FEIKTEAQP	TL	KY	IE	KL	INITTSR	TP	EP	SLNEEQDQRF	EH	SNV	RGH	GL	SLT	IT	AKFS	432																						
292 SR	THLEN	IEAS	ATWDLV	HGSE	TMKQD	TL	FEIKTEAQP	TL	KY	IE	KL	INITTSR	TP	EP	SLNEEQDQRF	EH	SNV	RGH	GL	SLT	IT	AKFS	432																						
306 FN	LGMDRI	IEAS	ATWDLV	GDSE	INAND	TL	VRMINIEASOL	EV	SY	YH	SVTD	ISTVAR	IT	EAHNE	KRADSSYV	KQGF	TR	SGGL	IG	SIDT	AKFS	425																							
306 FN	LGMDRI	IEAS	ATWDLV	GDSE	INAND	TL	VRMINIEASOL	EV	SY	YH	SVTD	ISTVAR	IT	EAHNE	KRADSSYV	KQGF	TR	SGGL	IG	SIDT	AKFS	425																							
306 FN	LGMDRI	IEAS	ATWDLV	GDSE	INAND	TL	VRMINIEASOL	EV	SY	YH	SVTD	ISTVAR	IT	EAHNE	KRADSSYV	KQGF	TR	SGGL	IG	SIDT	AKFS	425																							
326 IR	IGVSNR	IEAS	ATWDLV	HGSE	TMKQD	TL	FEIKTEAQP	TL	KY	IE	KL	INITTSR	TP	EP	SLNEEQDQRF	EH	SNV	RGH	GL	SLT	IT	AKFS	445																						
326 IR	IGVSNR	IEAS	ATWDLV	HGSE	TMKQD	TL	FEIKTEAQP	TL	KY	IE	KL	INITTSR	TP	EP	SLNEEQDQRF	EH	SNV	RGH	GL	SLT	IT	AKFS	445																						
326 IR	IGVSNR	IEAS	ATWDLV	HGSE	TMKQD	TL	FEIKTEAQP	TL	KY	IE	KL	INITTSR	TP	EP	SLNEEQDQRF	EH	SNV	RGH	GL	SLT	IT	AKFS	445																						
326 IR	IGVSNR	IEAS	ATWDLV	HGSE	TMKQD	TL	FEIKTEAQP	TL	KY	IE	KL	INITTSR	TP	EP	SLNEEQDQRF	EH	SNV	RGH	GL	SLT	IT	AKFS	445																						
308 IR	IGVSNR	IEAS	ATWDLV	HGSE	TMKQD	TL	FEIKTEAQP	TL	KY	IE	KL	INITTSR	TP	EP	SLNEEQDQRF	EH	SNV	RGH	GL	SLT	IT	AKFS	447																						
412	--AKSM	SLEF	VDQTKIO	VI	RAQL	VNAPOK	SLI	SLETVADGNYSYIAEMET	-----	ESWL	DRQ	AO	LT	QSGSGG	514																														
412	--AKSM	SLEF	VDQTKIO	VI	RAQL	VNAPOK	SLI	SLETVADGNYSYIAEMET	-----	ESWL	DRQ	AO	LT	QSGSGG	514																														
412	--AKSM	SLEF	VDQTKIO	VI	RAQL	VNAPOK	SLI	SLETVADGNYSYIAEMET	-----	ESWL	DRQ	AO	LT	QSGSGG	514																														
427	--TSKA	IGRTI	QIOPENIK	IEVG	IFV	TTTSENHGHYS	AOVGA	SOAAKFTV	TPNAPS	ITL	KGDY	EV	TL	EP	RS	INT	EA	FY	VM	TVGS	-----	KSFL	HR	EM	FL	LA	TP	SPST	537																
427	--TSKA	IGRTI	QIOPENIK	IEVG	IFV	TTTSENHGHYS	AOVGA	SOAAKFTV	TPNAPS	ITL	KGDY	EV	TL	EP	RS	INT	EA	FY	VM	TVGS	-----	KSFL	HR	EM	FL	LA	TP	SPST	537																
427	--TSKA	IGRTI	QIOPENIK	IEVG	IFV	TTTSENHGHYS	AOVGA	SOAAKFTV	TPNAPS	ITL	KGDY	EV	TL	EP	RS	INT	EA	FY	VM	TVGS	-----	KSFL	HR	EM	FL	LA	TP	SPST	537																
427	--TSKA	IGRTI	QIOPENIK	IEVG	IFV	TTTSENHGHYS	AOVGA	SOAAKFTV	TPNAPS	ITL	KGDY	EV	TL	EP	RS	INT	EA	FY	VM	TVGS	-----	KSFL	HR	EM	FL	LA	TP	SPST	537																
427	--TSKA	IGRTI	QIOPENIK	IEVG	IFV	TTTSENHGHYS	AOVGA	SOAAKFTV	TPNAPS	ITL	KGDY	EV	TL	EP	RS	INT	EA	FY	VM	TVGS	-----	KSFL	HR	EM	FL	LA	TP	SPST	537																
414	--VT	KL	EGKI	VO	YENLK	SV	ITV	SEEHA	-----	VGH	DT	GH	KE	IK	IT	PO	AS	ITE	AE	LG	Y	TV	TH	IE	SP	RT	LD	FN	EM	LL	TM	KN	-----	KAWL	HR	EM	FL	LA	TP	PGADT	512				
433	--SG	KIT	GNL	QI	OPENIK	IEVG	IFV	TTTSENHGHYS	AOVGA	SOAAKFTV	TPNAPS	ITL	KGDY	EV	TL	EP	RS	INT	EA	FY	VM	TVGS	-----	KSFL	HR	EM	FL	LA	TP	SPST	537														
414	--LE	PI	EG	KV	VO	YENLK	SV	ITV	SEEHA	-----	VGH	DT	GH	KE	IK	IT	PO	AS	ITE	AE	LG	Y	TV	TH	IE	SP	RT	LD	FN	EM	LL	TM	KN	-----	KAWL	HR	EM	FL	LA	TP	PGADT	512			
412	EA	KK	KAT	GH	YD	ANKIV	TV	KV	PEP	TT	SD	YV	-----	VGH	DT	GH	KE	IK	IT	PO	AS	ITE	AE	LG	Y	TV	TH	IE	SP	RT	LD	FN	EM	LL	TM	KN	-----	KAWL	HR	EM	FL	LA	TP	PGADT	512
426	--TT	KAT	GW	I	QIOPENIK	IEVG	IFV	TTTSENHGHYS	AOVGA	SOAAKFTV	TPNAPS	ITL	KGDY	EV	TL	EP	RS	INT	EA	FY	VM	TVGS	-----	KSFL	HR	EM	FL	LA	TP	SPST	537														
426	--TT	KAT	GW	I	QIOPENIK	IEVG	IFV	TTTSENHGHYS	AOVGA	SOAAKFTV	TPNAPS	ITL	KGDY	EV	TL	EP	RS	INT	EA	FY	VM	TVGS	-----	KSFL	HR	EM	FL	LA	TP	SPST	537														
446	--SK	KMT	GK	SIOPENIK	IEVG	IFV	TTTSENHGHYS	AOVGA	SOAAKFTV	TPNAPS	ITL	KGDY	EV	TL	EP	RS	INT	EA	FY	VM	TVGS	-----	KSFL	HR	EM	FL	LA	TP	SPST	537															
446	--SK	KMT	GK	SIOPENIK	IEVG	IFV	TTTSENHGHYS	AOVGA	SOAAKFTV	TPNAPS	ITL	KGDY	EV	TL	EP	RS	INT	EA	FY	VM	TVGS	-----	KSFL	HR	EM	FL	LA	TP	SPST	537															
446	--SK	KMT	GK	SIOPENIK	IEVG	IFV	TTTSENHGHYS	AOVGA	SOAAKFTV	TPNAPS	ITL	KGDY	EV	TL	EP	RS	INT	EA	FY	VM	TVGS	-----	KSFL	HR	EM	FL	LA	TP	SPST	537															
446	--SK	KMT	GK	SIOPENIK	IEVG	IFV	TTTSENHGHYS	AOVGA	SOAAKFTV	TPNAPS	ITL	KGDY	EV	TL	EP	RS	INT	EA	FY	VM	TVGS	-----	KSFL	HR	EM	FL	LA	TP	SPST	537															
428	--SK	KMT	GK	SIOPENIK	IEVG	IFV	TTTSENHGHYS	AOVGA	SOAAKFTV	TPNAPS	ITL	KGDY	EV	TL	EP	RS	INT	EA	FY	VM	TVGS	-----	KSFL	HR	EM	FL	LA	TP	SPST	537															

Figure 7 (Part 1 of 3)

[illegible]

Figure 7 (Part 2 of 3)

YFV_ASBI.AY640589.1/292-784
 YFV_17D_vaccine_strain.NC_002031.1/292-784
 YFV_vaccine_strain_17D-213.U17067.1/292-784
 YFV_isol-Pasteur_17D-204.X15062.1/292-784
 IEV_SA14.D90194.1/307-806
 IEV_virus.NC_001437.1/307-806
 IEV_virus.M55506.1/307-806
 IEV_SA14-14-2.AF315119.1/307-806
 IEV_SA14-14-2.D90195.1/307-806
 DWV_1.NC_001477.1/294-788
 DWV_16681.NC_001474.2/287-781
 DWV_4.NC_002640.1/313-807
 DWV_3.NC_001475.2/294-786
 TEV_virus.NC_001672.1/292-787
 WNV_956.NC_001563.2/306-802
 WNV_NY99_isol-385-99.NC_009942.1/306-806
 WNV_Chin-01.AY490240.2/306-806
 ZW_MR766-NIID.LC002520.1/326-829
 ZW_ZikaSPH2015.KU321639.1/326-829
 ZW_MR_766.NC_012532.1/326-825
 ZW_MR_766.AY632535.2/326-825
 ZW_BeH818995.KU365777.1/308-811

748	MG	AV	L	I	W	V	G	I	N	T	R	N	M	T	M	S	M	I	L	V	G	V	I	M	M	F	L	S	L	G	V	A			
748	MG	AV	L	I	W	V	G	I	N	T	R	N	M	T	M	S	M	I	L	V	G	V	I	M	M	F	L	S	L	G	V	A			
748	MG	AV	L	I	W	V	G	I	N	T	R	N	M	T	M	S	M	I	L	V	G	V	I	M	M	F	L	S	L	G	V	A			
748	MG	AV	L	I	W	V	G	I	N	T	R	N	M	T	M	S	M	I	L	V	G	V	I	M	M	F	L	S	L	G	V	A			
770	MG	AL	L	L	M	G	V	N	A	R	D	R	S	I	A	L	A	F	L	A	T	G	G	V	L	V	F	L	A	T	N	H	A		
770	MG	AL	L	L	M	G	V	N	A	R	D	R	S	I	A	L	A	F	L	A	T	G	G	V	L	V	F	L	A	T	N	H	A		
770	MG	AL	L	L	M	G	V	N	A	R	D	R	S	I	A	L	A	F	L	A	T	G	G	V	L	V	F	L	A	T	N	H	A		
770	MG	AL	L	L	M	G	V	N	A	R	D	R	S	I	A	L	A	F	L	A	T	G	G	V	L	V	F	L	A	T	N	H	A		
770	MG	AL	L	L	M	G	V	N	A	R	D	R	S	I	A	L	A	F	L	A	T	G	G	V	L	V	F	L	A	T	N	H	A		
752	I	G	I	L	L	T	W	L	G	L	N	S	R	S	T	S	L	S	M	T	C	I	A	V	G	M	T	L	Y	L	G	V	M	Q	
745	I	G	V	I	L	T	W	L	G	L	N	S	R	S	T	S	L	S	V	T	L	V	L	V	G	I	V	T	L	Y	L	G	V	M	Q
771	I	G	F	L	V	L	I	G	T	N	S	R	N	T	S	M	A	M	T	C	I	A	V	G	I	T	L	F	L	G	F	T	V	Q	
750	I	G	V	L	L	T	W	L	G	L	N	S	K	N	T	S	M	S	F	S	C	I	A	I	I	T	L	Y	L	G	A	V	Q		
751	L	G	V	A	L	A	L	G	L	N	M	R	N	P	T	M	S	M	S	F	L	A	G	L	V	L	A	M	T	L	G	V	G	A	
766	L	G	A	L	L	M	G	I	N	A	R	D	R	S	I	A	M	T	F	L	A	V	G	G	V	L	L	F	L	S	V	N	H	A	
770	L	G	A	L	L	M	G	I	N	A	R	D	R	S	I	A	L	T	F	L	A	V	G	G	V	L	L	F	L	S	V	N	H	A	
770	L	G	A	L	L	M	G	I	N	A	R	D	R	S	I	A	L	T	F	L	A	I	G	G	V	L	L	F	L	S	V	N	H	A	
793	I	G	T	L	V	W	L	G	L	N	T	K	N	G	S	I	S	L	T	C	L	A	L	G	G	V	M	I	F	L	S	T	A	S	A
793	I	G	T	L	V	W	L	G	L	N	T	K	N	G	S	I	S	L	M	C	L	A	L	G	G	V	L	I	F	L	S	T	A	S	A
789	I	G	T	L	V	W	L	G	L	N	T	K	N	G	S	I	S	L	T	C	L	A	L	G	G	V	M	I	F	L	S	T	A	S	A
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775	I	G	T	L	V	W	L	G	L	N	T	K	N	G	S	I	S	L	M	C	L	A	L	G	G	V	L	I	F	L	S	T	A	S	A

Figure 7 (Part 3 of 3)

10/23

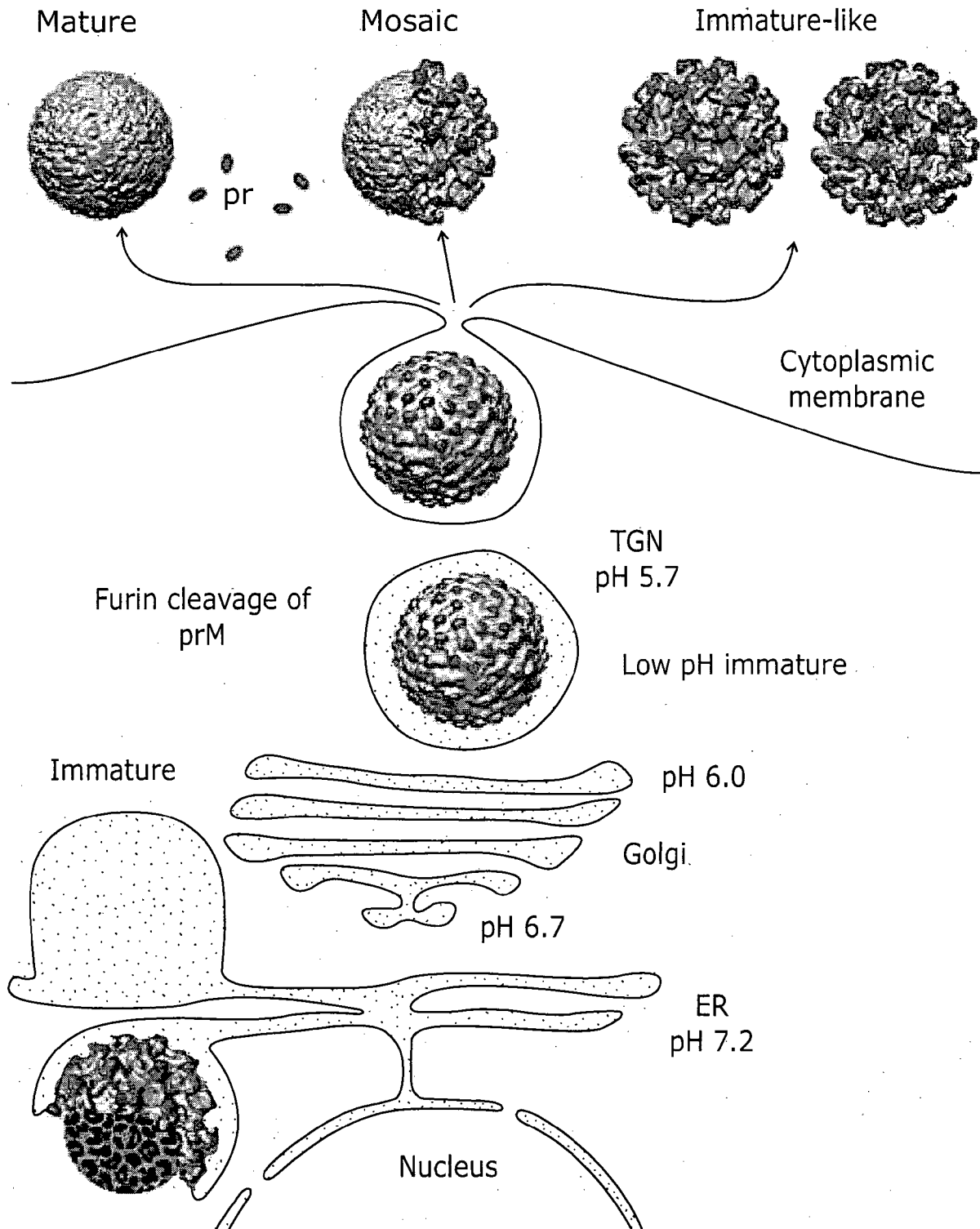


Figure 8

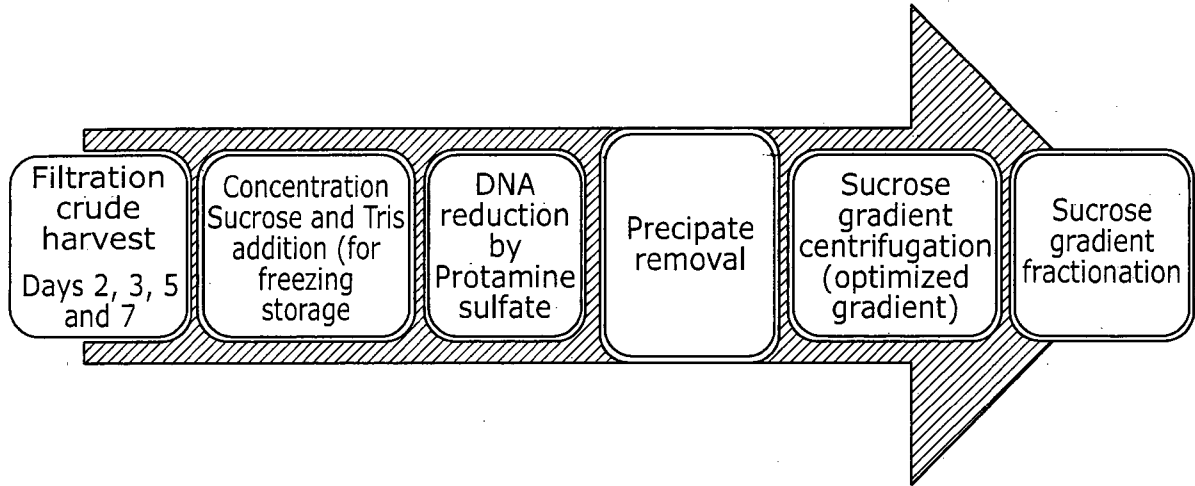


Figure 9A

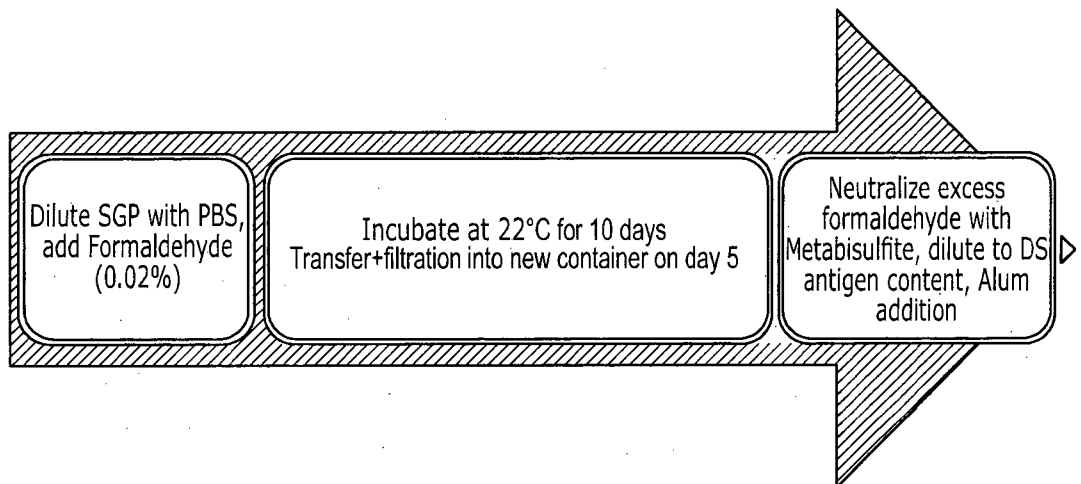


Figure 9B

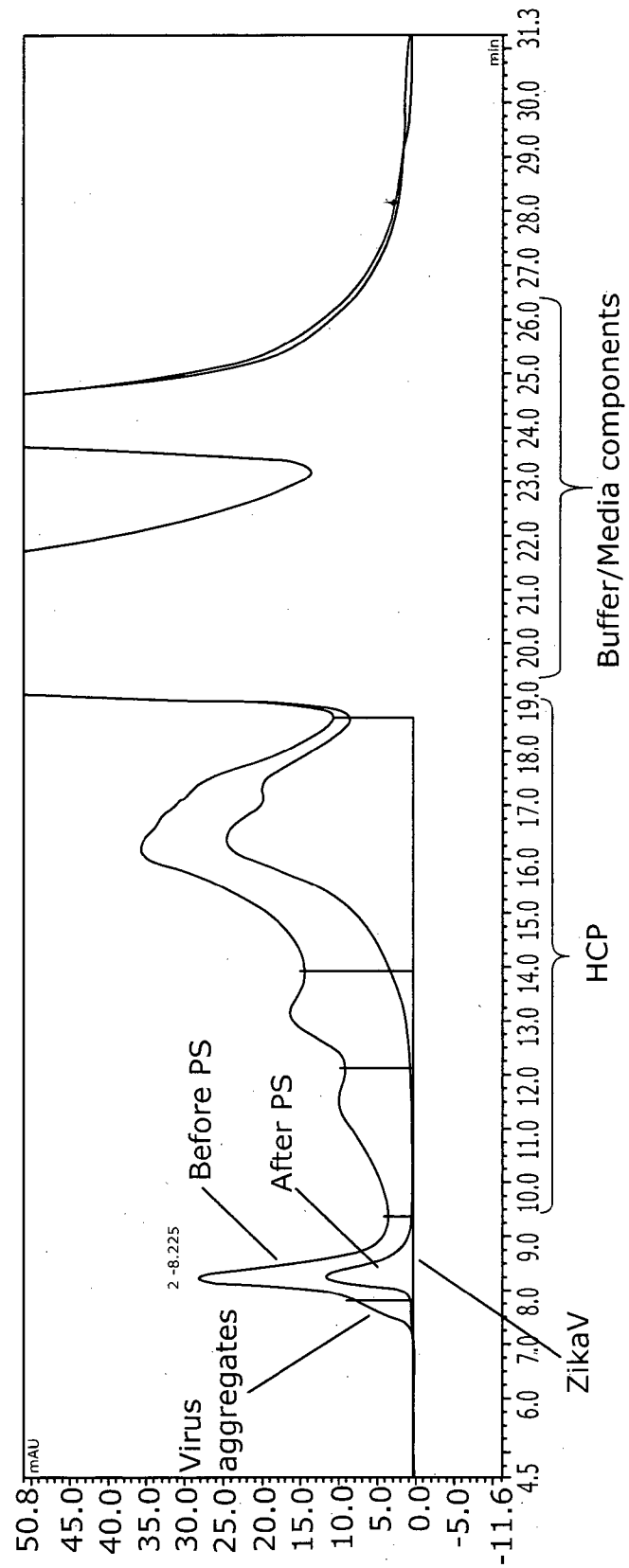
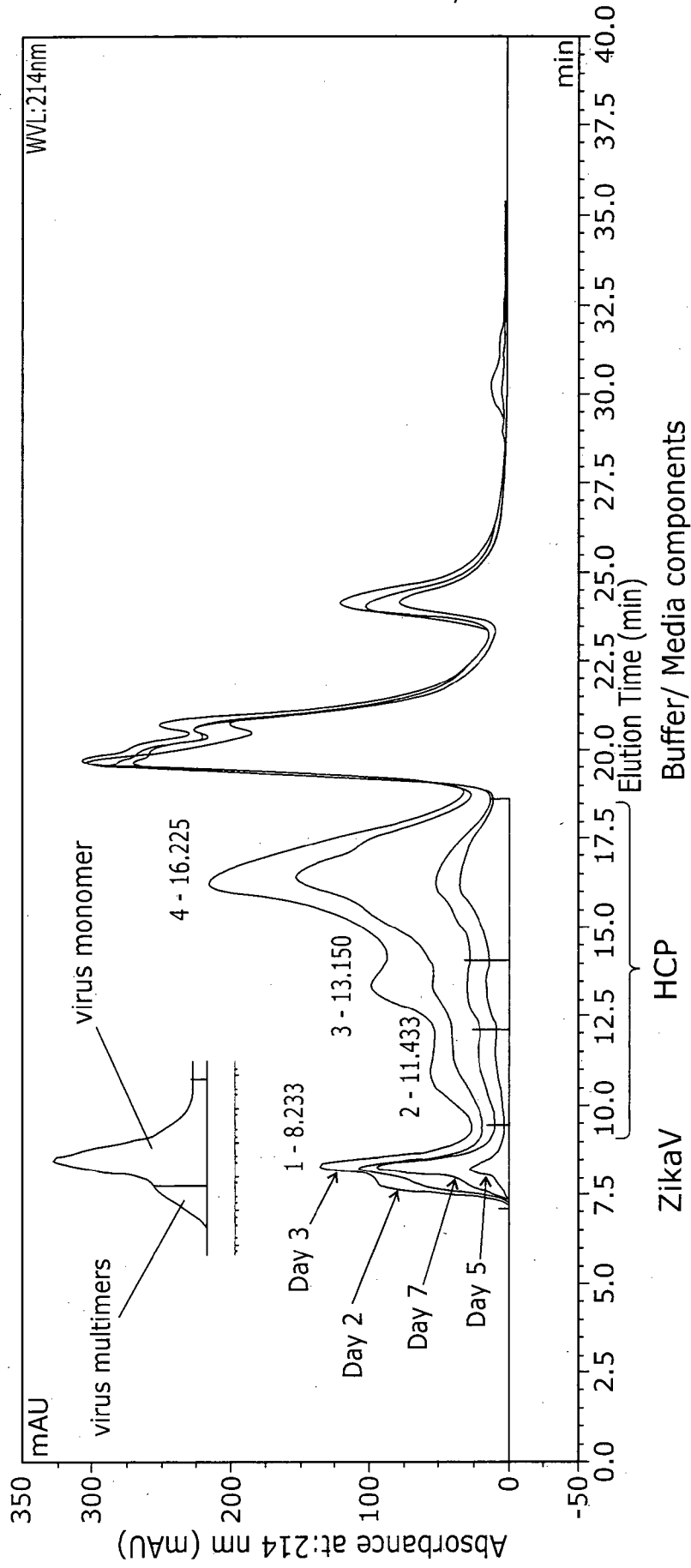
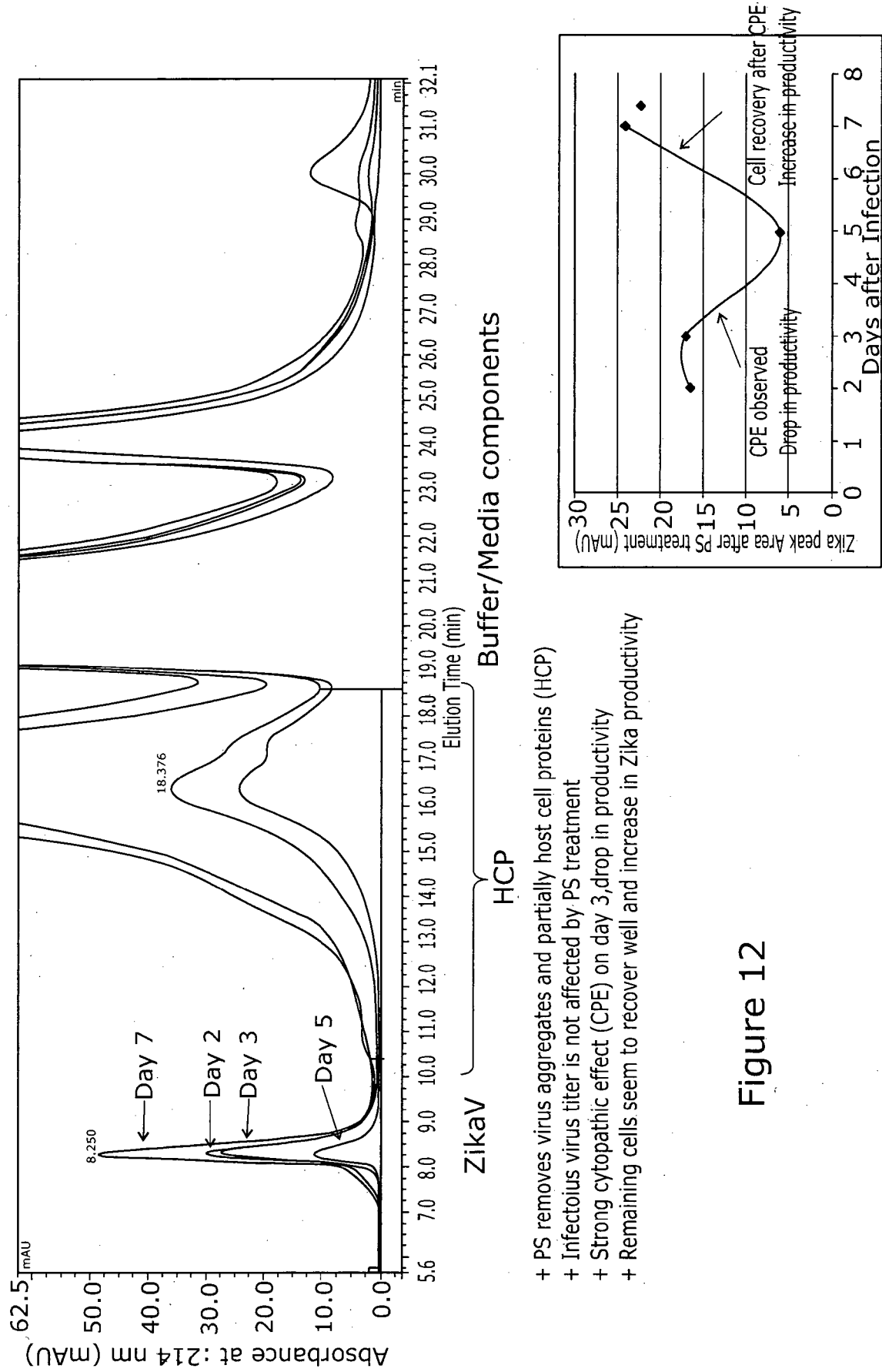


Figure 10



- + Similar virus concentration in harvests Day 2, Day 3, Day 7; lower virus concentration in harvest Day 5
- + Day 2 and Day 3 harvests contained more HCP than Days 5/7 (correlates with observed CPE)
- + Minor amount of virus multimers observed

Figure 11



- + PS removes virus aggregates and partially host cell proteins (HCP)
- + Infectious virus titer is not affected by PS treatment
- + Strong cytopathic effect (CPE) on day 3, drop in productivity
- + Remaining cells seem to recover well and increase in Zika productivity

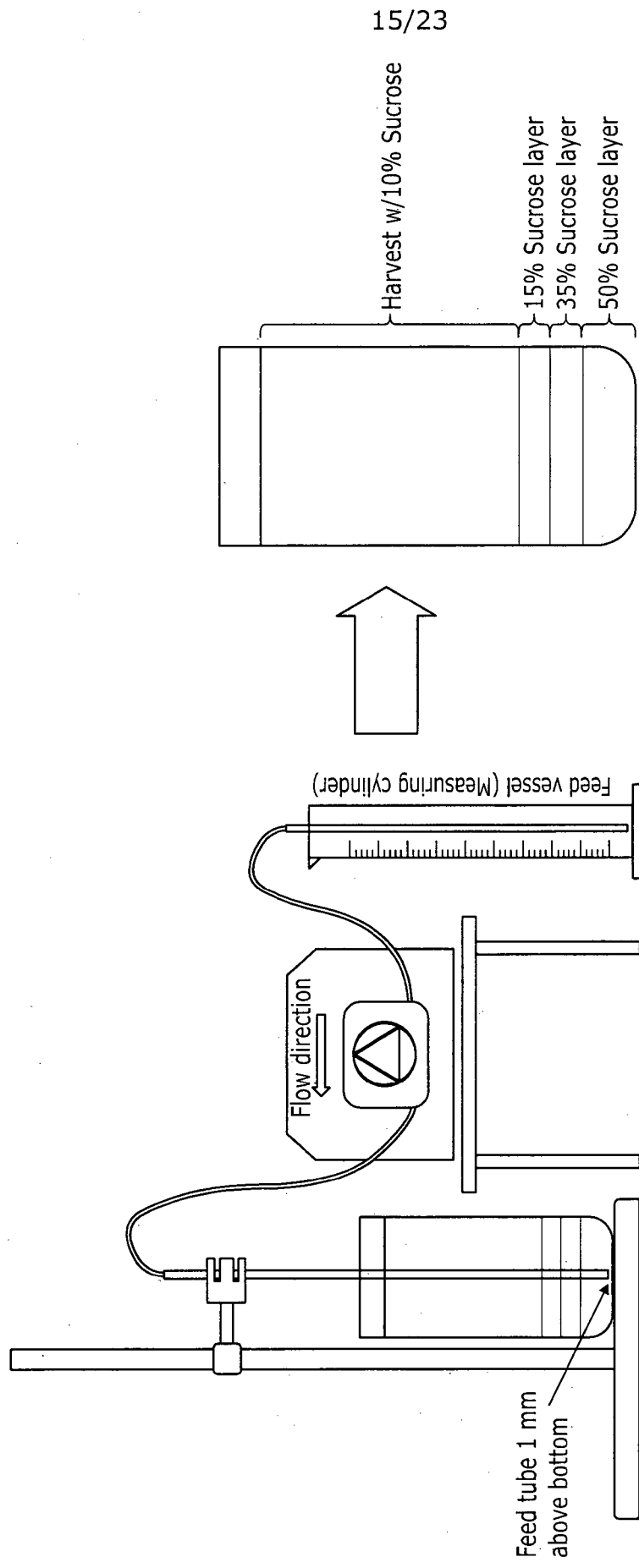
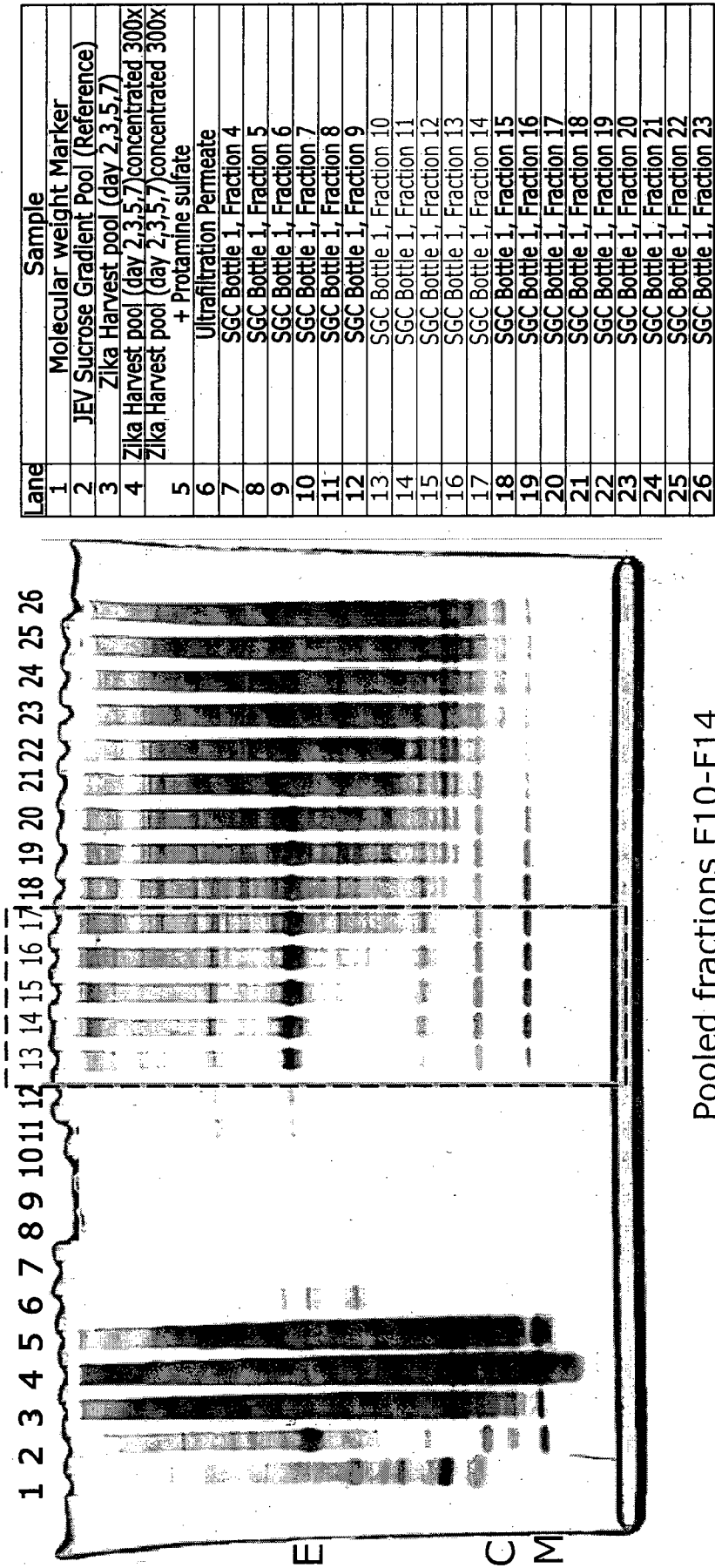


Figure 13



Pooled fractions F10-F14
(10mL total volume pere bottle)

Figure 14

Comparison of harvest schedules

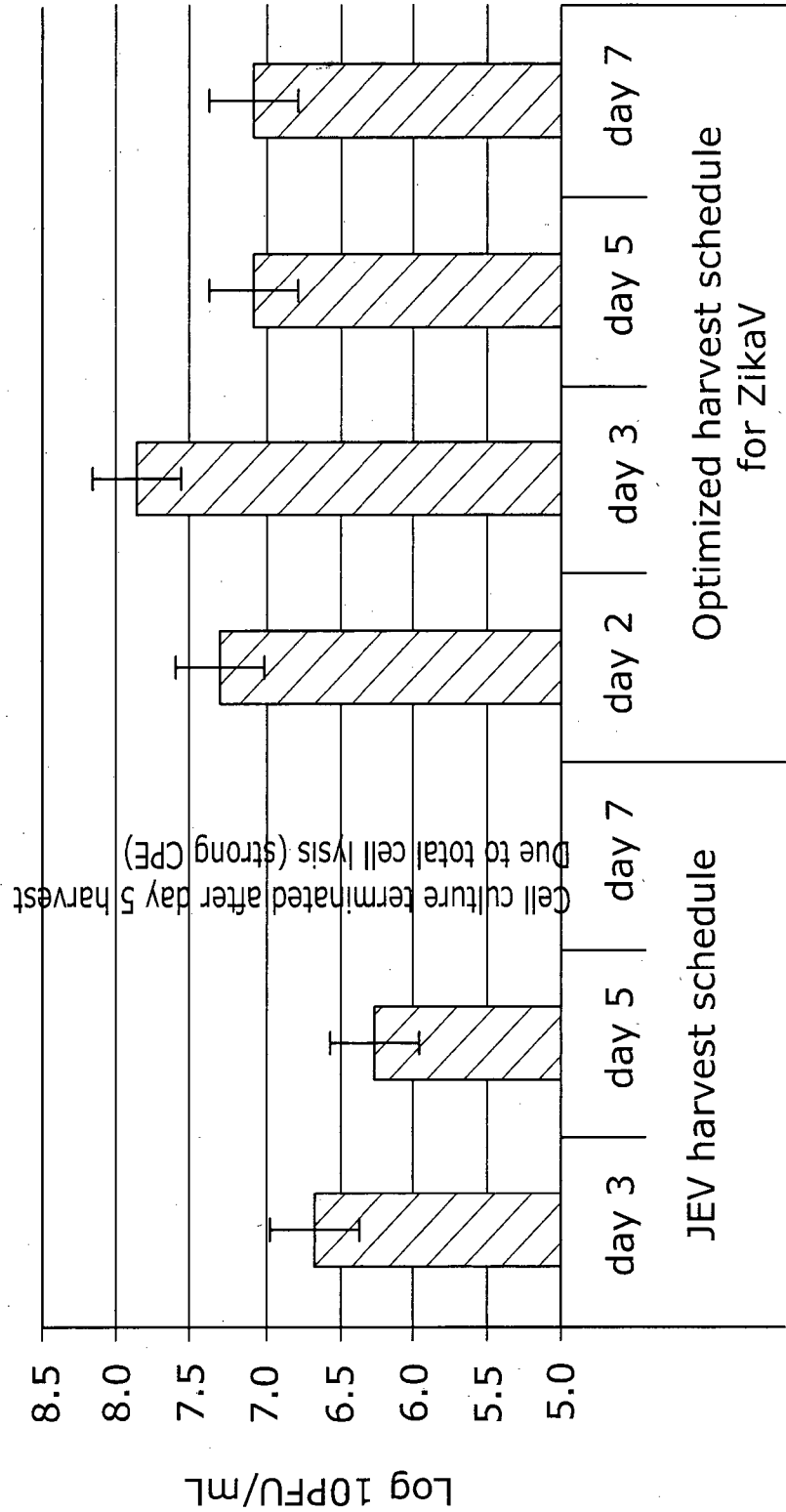


Figure 15

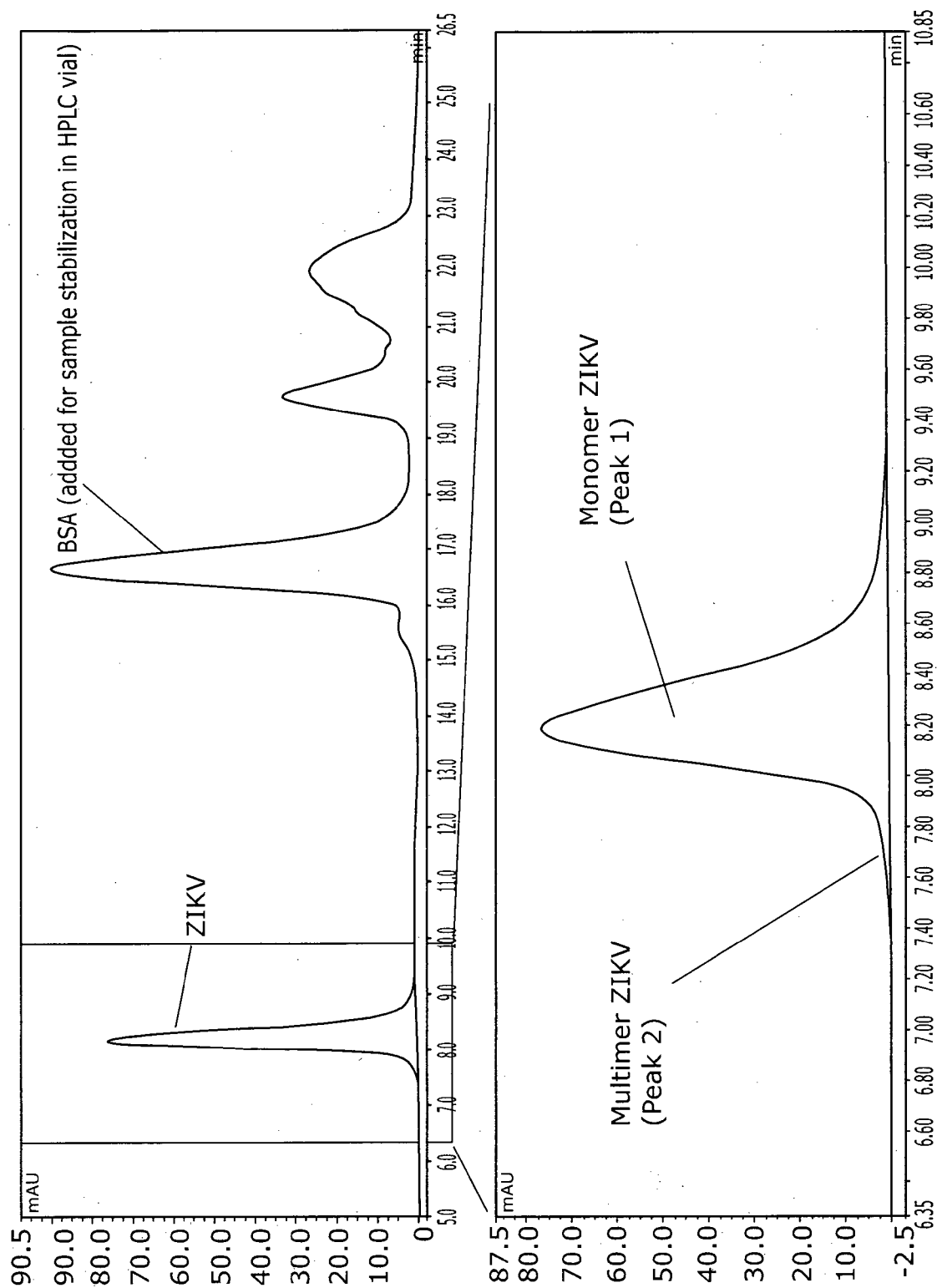


Figure 16

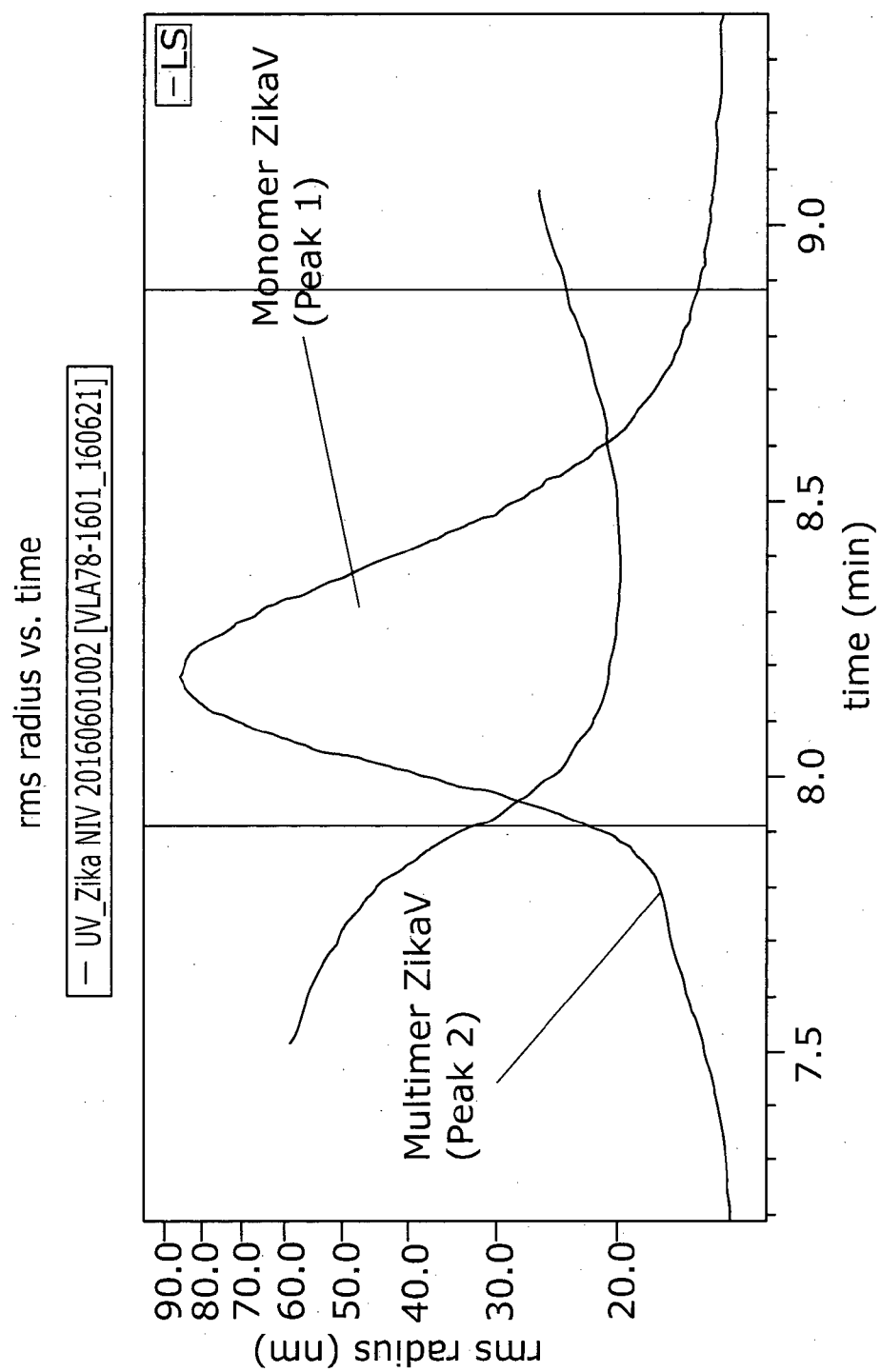


Figure 17

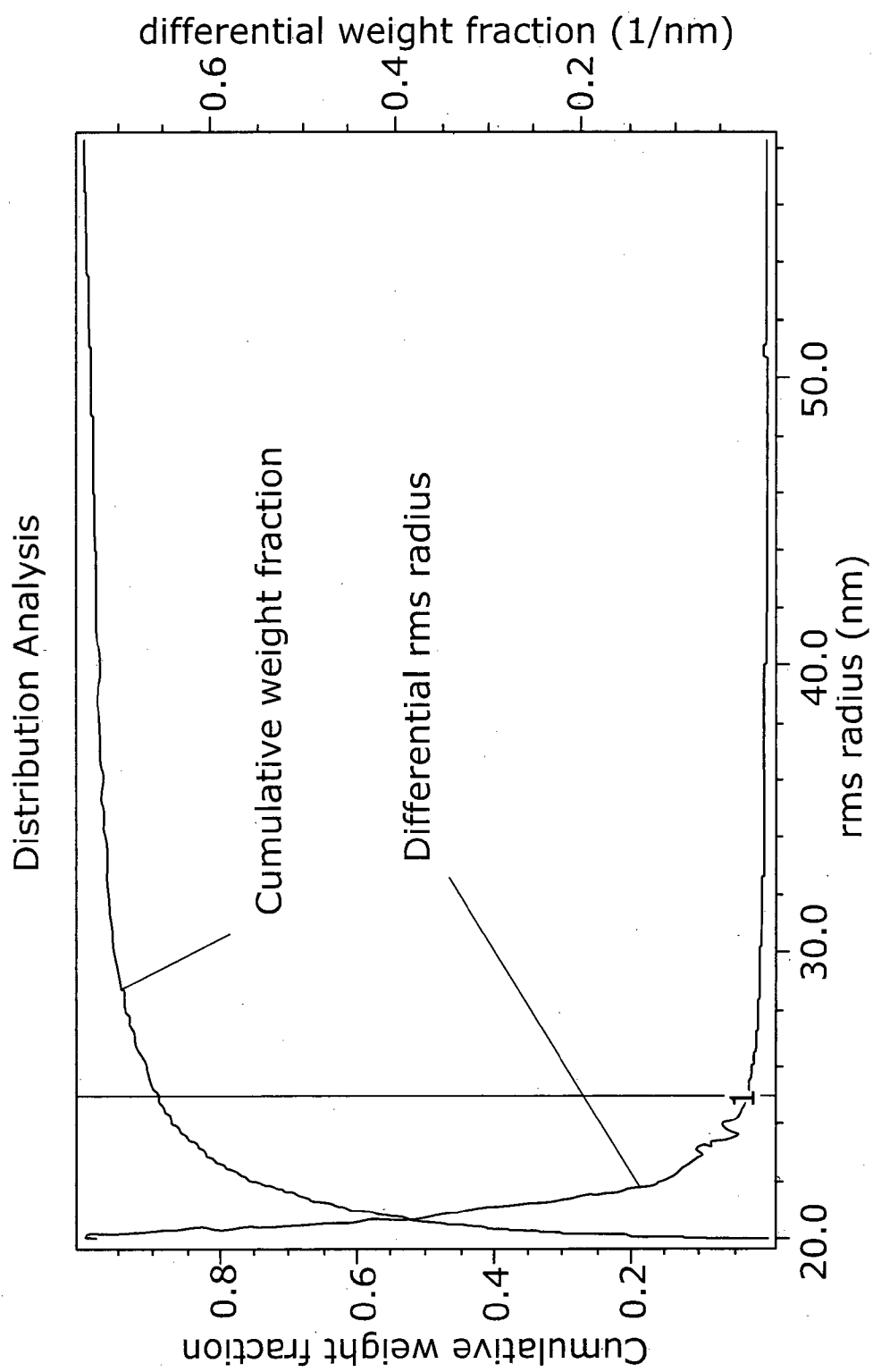


Figure 18

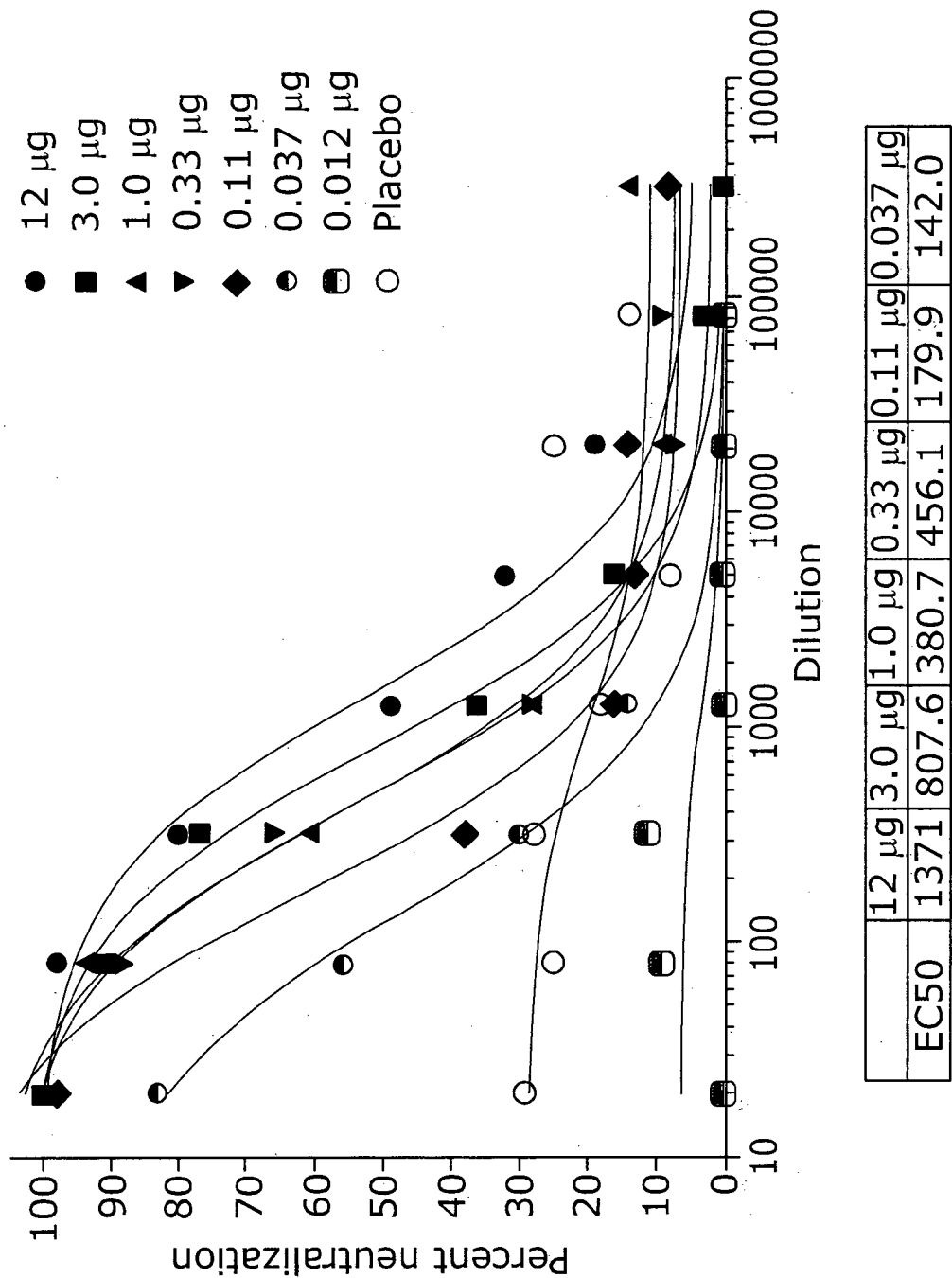
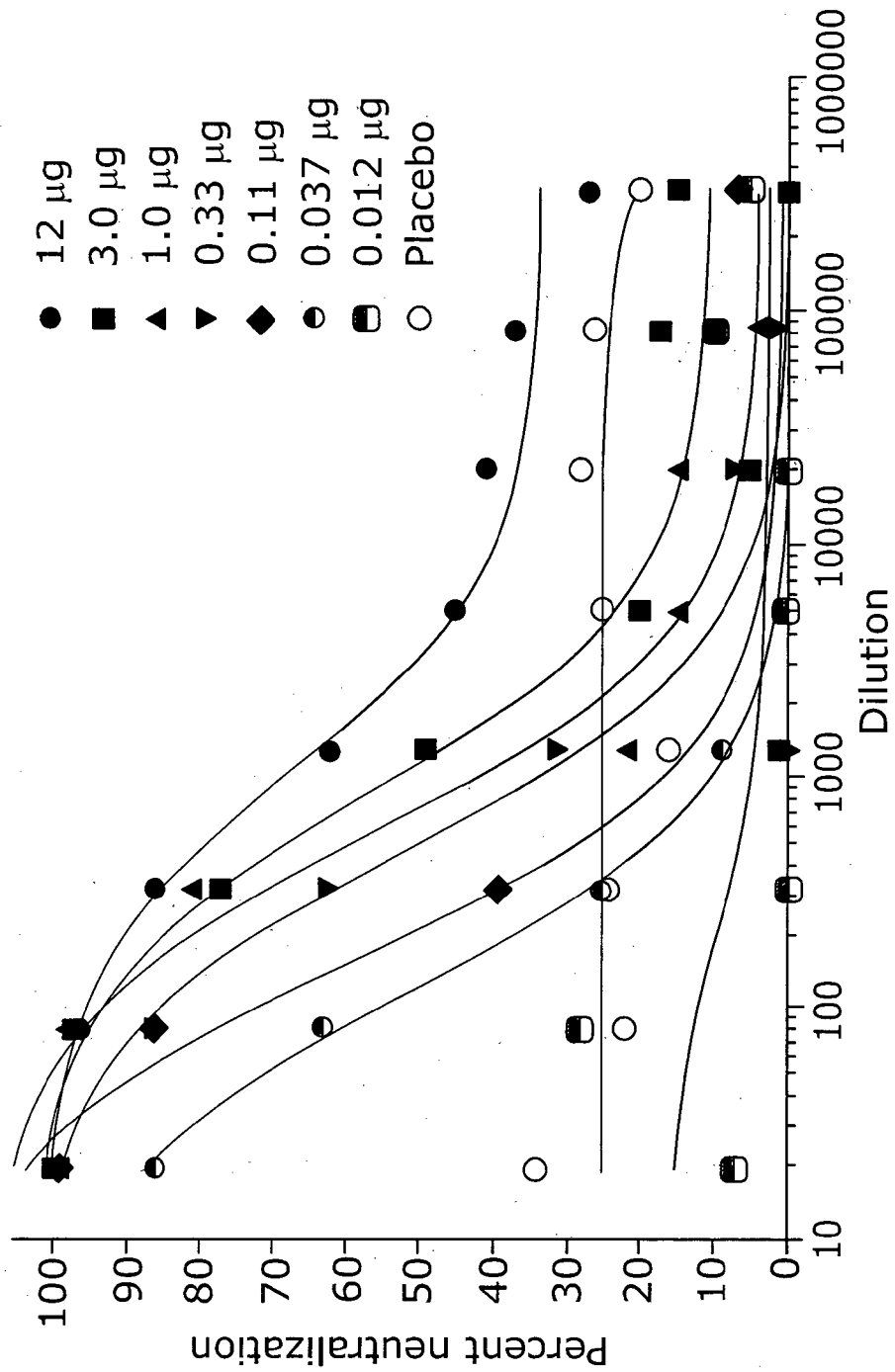


Figure 19



	12 µg	3.0 µg	1.0 µg	0.33 µg	0.11 µg	0.037 µg
EC50	1029	819.1	556.9	477.3	158.1	118.0

Figure 20

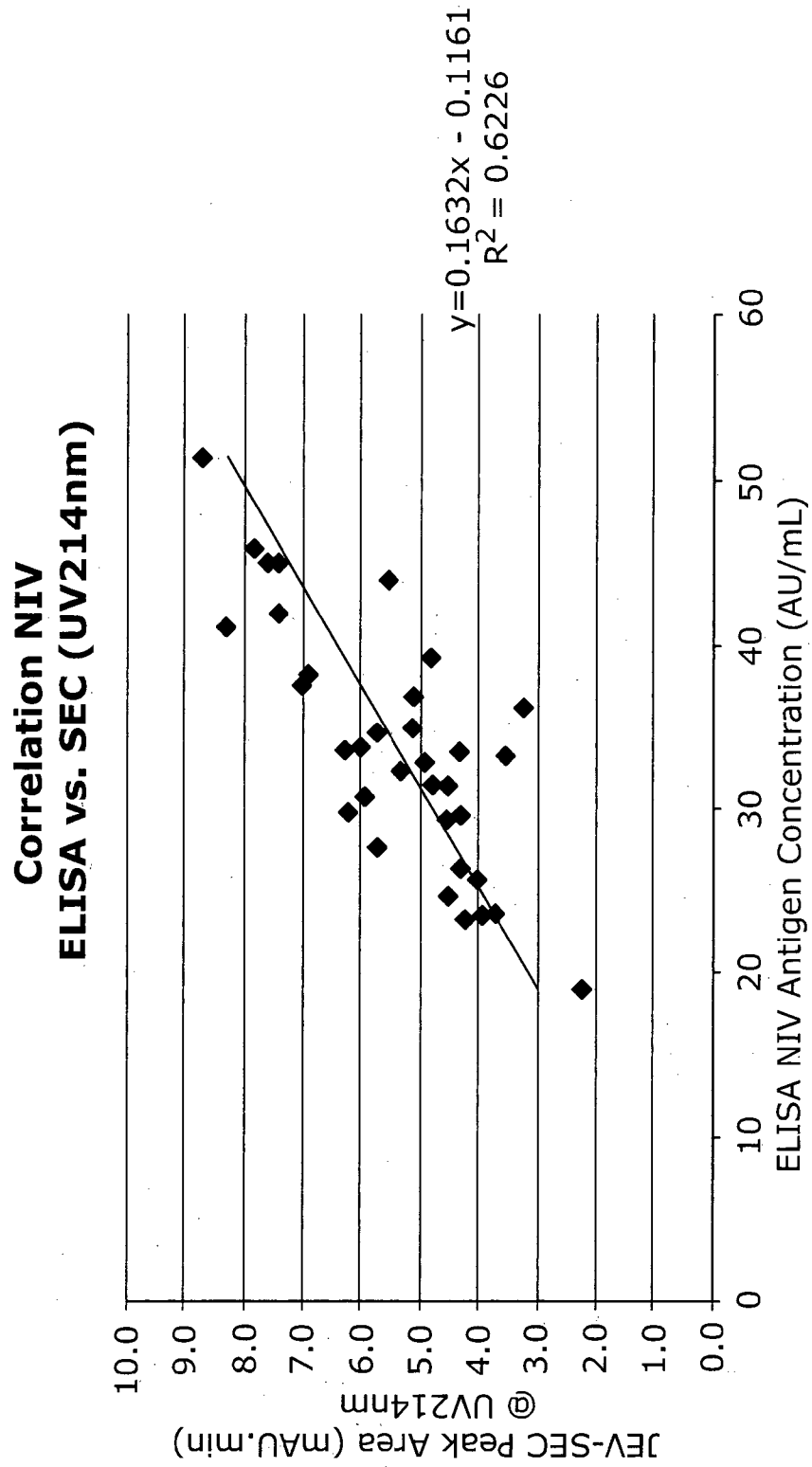


Figure 21