

FIG. 1A

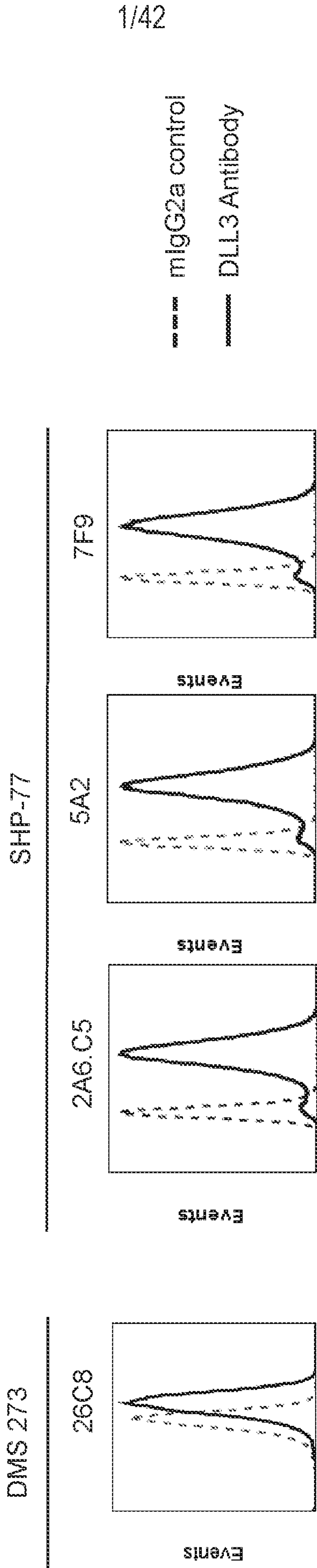


FIG. 1B

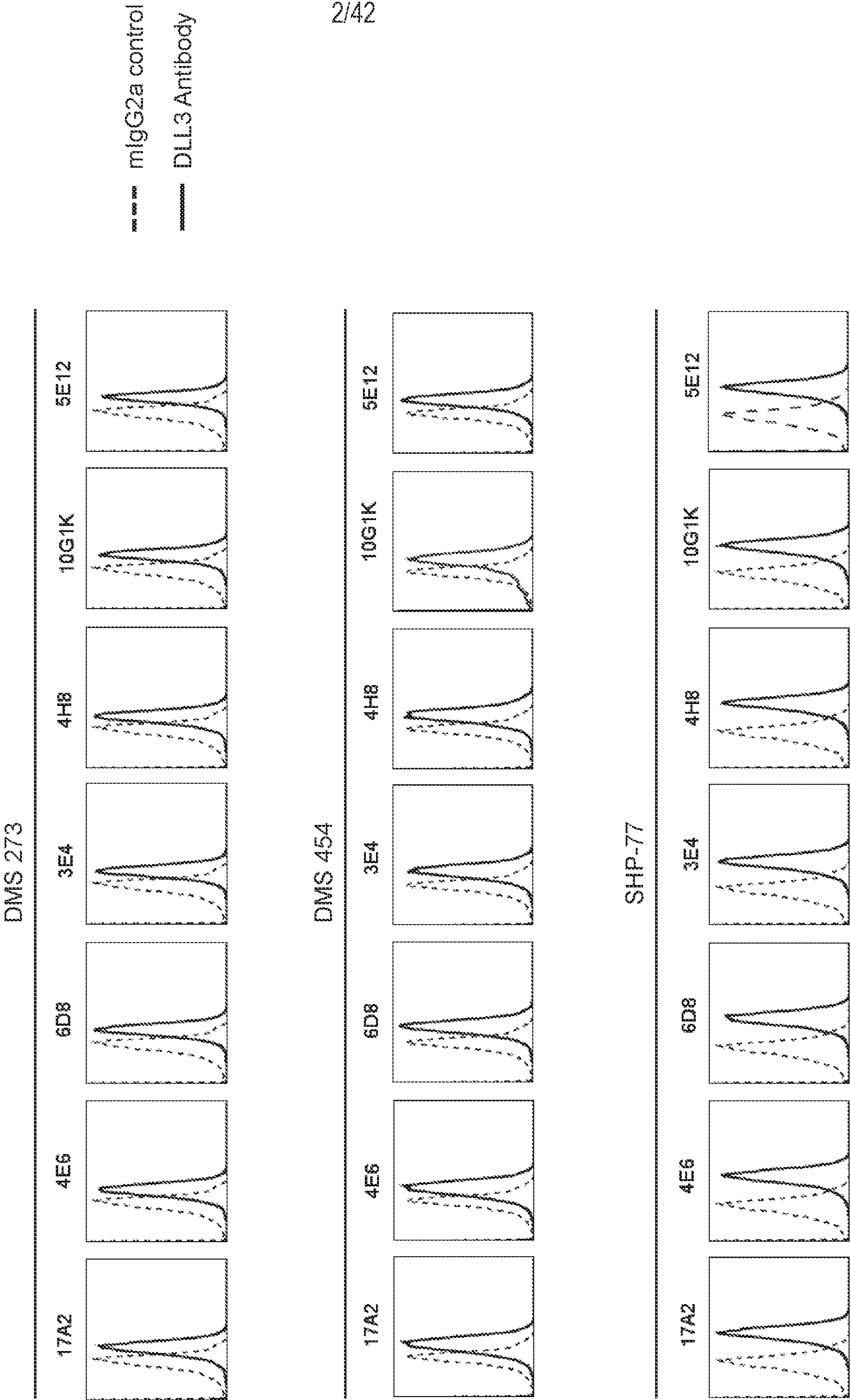


FIG. 2A

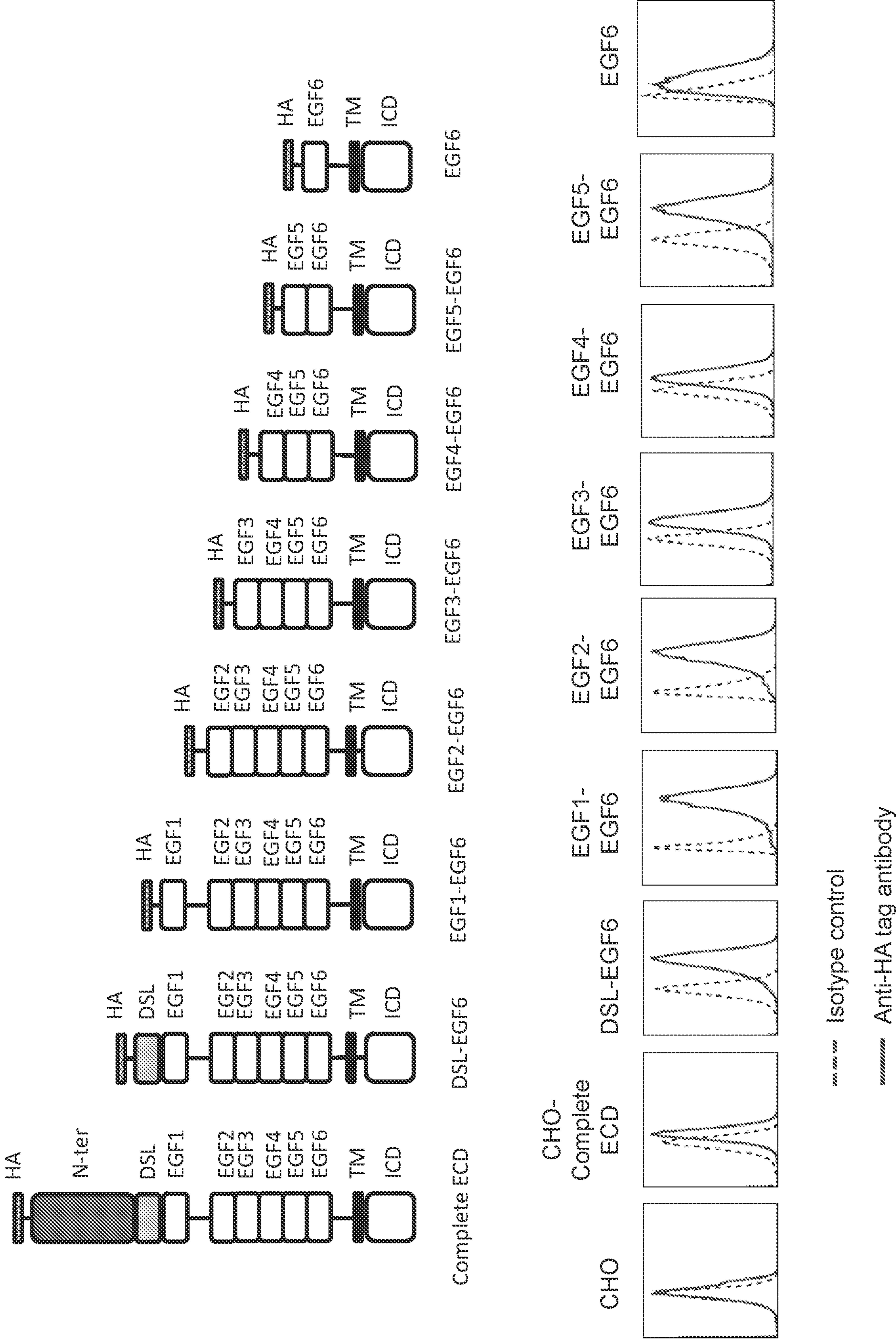


FIG. 2B

SEQ ID NO	Name/Component	Sequence
556	Human DLL3 complete ECD	METDTLLWVLLWVPGSTGYPDVPDYAGMLAGVFELQIHSFGPGPGAPRSPCSARL PCRlFFRVCLKPGlSEEAESPcALGAALSARGPVYTEQPGAPADlPLPDGLLQVPFRD AWPGTFsIIETWREELGDQIGGPAWSllARVAGRRRLAAGGPWARDlQRAGAWELRFSY RARCEPPAVGTACTRLCRPRsAPSRcPGlRPCAPLEDECEAPLVCRAgCSPEHGfCEQP GECRCLEGWTGPlCTVPVSTSSCLSPRGPSsATTGCLVPGPgPCDGNPCANGGSCSETPR SFECTCPRGfYGLRCEVSGVTCADGPCfNGGLCVGGADPDsAYICHCPPGFQGSNCEKRV DRCSLQPCRNGGLCLDLGHALRCRCRAGfAGPRCEHDLDDCAGRACANGGTCVEGGGAHR CSCALGFGGRDCRERADPCAARPCAHHGGRcYAHfSGLVCACAPGYMGARCEFPVHPDGAS ALPAAPPGLRPGDPQRYLLPPALGLLVAAGVAGAAllLVHVRRRGHsQDAGSRllAGTPE PSVHALPDALNNLRtQEGSGDGPSSsVDWNRPEDVDPQGIYVISAPSIYAREVATPlFPP LHTGRAGQRQHllFPYPSSIlSVK
557	Human DLL3 DSL-EGF6	METDTLLWVLLWVPGSTGYPDVPDYAGMLGSARCEPPAVGTACTRLCRPRsAPSRcG PGLRPCAPLEDECEAPLVCRAgCSPEHGfCEQPGECRCLEGWTGPlCTVPVSTSSCLSPR GPSSATTGCLVPGPgPCDGNPCANGGSCSETPRsFECTCPRGfYGLRCEVSGVTCADGPC FNGGLCVGGADPDsAYICHCPPGFQGSNCEKRVDRCSLQPCRNGGLCLDLGHALRCRCRA GFAGPRCEHDLDDCAGRACANGGTCVEGGGAHRCSALGFGGRDcRERADPCAARPCAHHG GRcYAHfSGLVCACAPGYMGARCEFPVHPDGASALPAAPPGLRPGDPQRYLLPPALGLLV AAGVAGAAllLVHVRRRGHsQDAGSRllAGTPEPSVHALPDALNNLRtQEGSGDGPSSsV DWNRPEDVDPQGIYVISAPSIYAREVATPlFPPlHTGRAGQRQHllFPYPSSIlSVK
558	Human DLL3 EGF1-EGF6	METDTLLWVLLWVPGSTGYPDVPDYAGMLGSAPLVCRAgCSPEHGfCEQPGECRCLE GWTGPlCTVPVSTSSCLSPRGPSsATTGCLVPGPgPCDGNPCANGGSCSETPRsFECTCP RGfYGLRCEVSGVTCADGPCfNGGLCVGGADPDsAYICHCPPGFQGSNCEKRVDRCSLQP CRNGGLCLDLGHALRCRCRAGfAGPRCEHDLDDCAGRACANGGTCVEGGGAHRCSALGF GGRDCRERADPCAARPCAHHGGRcYAHfSGLVCACAPGYMGARCEFPVHPDGASALPAAPP GLRPGDPQRYLLPPALGLLVAAGVAGAAllLVHVRRRGHsQDAGSRllAGTPEPSVHALP DALNNLRtQEGSGDGPSSsVDWNRPEDVDPQGIYVISAPSIYAREVATPlFPPlHTGRAG QRQHllFPYPSSIlSVK

FIG. 2C

SEQ. ID. NO.	Name/ Component	Sequence
559	Human DLL3 EGF2- EGF6	METDTLLLWVLLWVPGSTGYPDYAGMLSGPGCDGNPCANGGSCSETPRSFECT CPRGFYGLRCEVSGVTCADGPCFNGGLCVGGADPDSAYICHCPPGFQGSNCEKRVDRCSL QPCRNGGLCLDLGHALRCRCRAGFAGPRCEHDLDDCAGRACANGGTCVEGGGAHRCSCAL GFGGRDCRERADPCAARPCAHGGRCYAHFSGILVCACAPGYMGARCEFPVHPDGASALPAA PPGLRPGDPQRYLLPPALGLLVAAGVAGAAALLLVHVRRRGHSDAGSRLLAGTPEPSVHA LPDALNNLRTQEGSGDGPSSVDWNRPEDVDPQGIYVISAPSIYAREVATPLFPPLHTGR AGQRQHLLFPYPSSILSVK
560	Human DLL3 EGF3- EGF6	METDTLLLWVLLWVPGSTGYPDYAGMLSGSVTCADGPCFNGGLCVGGADPPDSAY ICHCPPGFQGSNCEKRVDRCSLQPCRNGGLCLDLGHALRCRCRAGFAGPRCEHDLDDCAG RACANGGTCVEGGGAHRCSCALGFGGRDCRERADPCAARPCAHGGRCYAHFSGILVCACAP GYMGARCEFPVHPDGASALPAAAPPGLRPGDPQRYLLPPALGLLVAAGVAGAAALLLVHVR RGHSQDAGSRLLAGTPEPSVHALPDALNNLRTQEGSGDGPSSVDWNRPEDVDPQGIYVI SAPSIYAREVATPLFPPLHTGRAGQRQHLLFPYPSSILSVK
561	Human DLL3 EGF4- EGF6	METDTLLLWVLLWVPGSTGYPDYAGMLGSRVDRCSLQPCRNGGLCLDLGHALRCR CRAGFAGPRCEHDLDDCAGRACANGGTCVEGGGAHRCSCALGFGGRDCRERADPCAARPC AHGGRCYAHFSGILVCACAPGYMGARCEFPVHPDGASALPAAAPPGLRPGDPQRYLLPPALG LLVAAGVAGAAALLLVHVRRRGHSDAGSRLLAGTPEPSVHALPDALNNLRTQEGSGDGPS SSVDWNRPEDVDPQGIYVISAPSIYAREVATPLFPPLHTGRAGQRQHLLFPYPSSILSVK
562	Human DLL3 EGF5- EGF6	METDTLLLWVLLWVPGSTGYPDYAGMLGSDLDDCAGRACANGGTCVEGGGAHRCS CALGFGGRDCRERADPCAARPCAHGGRCYAHFSGILVCACAPGYMGARCEFPVHPDGASAL PAAAPPGLRPGDPQRYLLPPALGLLVAAGVAGAAALLLVHVRRRGHSDAGSRLLAGTPEPS VHALPDALNNLRTQEGSGDGPSSVDWNRPEDVDPQGIYVISAPSIYAREVATPLFPPLH TGRAGQRQHLLFPYPSSILSVK
563	Human DLL3 EGF6	METDTLLLWVLLWVPGSTGYPDYAGMLGSRADPCAARPCAHGGRCYAHFSGILVCA CAPGYMGARCEFPVHPDGASALPAAAPPGLRPGDPQRYLLPPALGLLVAAGVAGAAALLLVH VRRRGHSQDAGSRLLAGTPEPSVHALPDALNNLRTQEGSGDGPSSVDWNRPEDVDPQGI YVISAPSIYAREVATPLFPPLHTGRAGQRQHLLFPYPSSILSVK

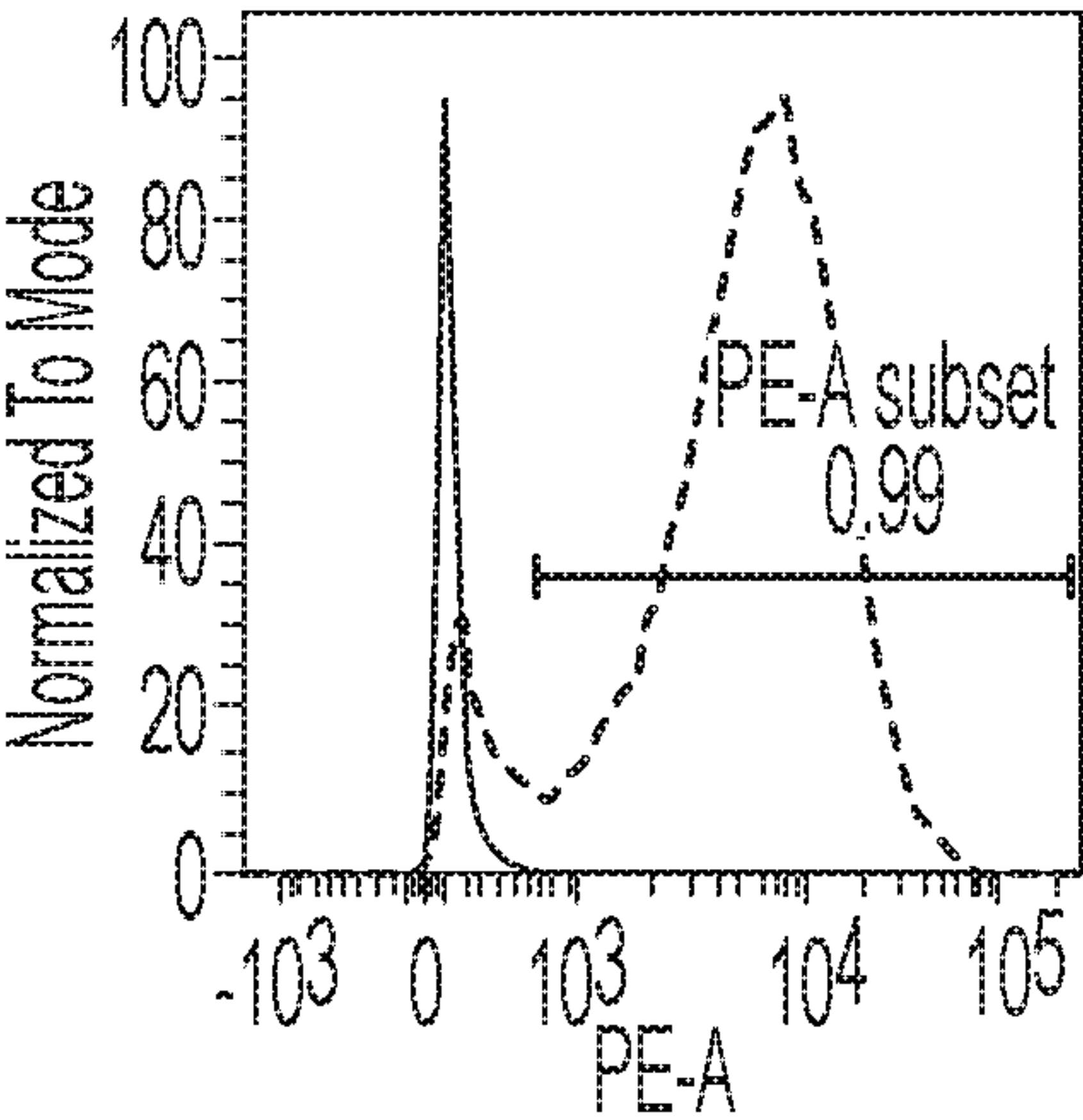
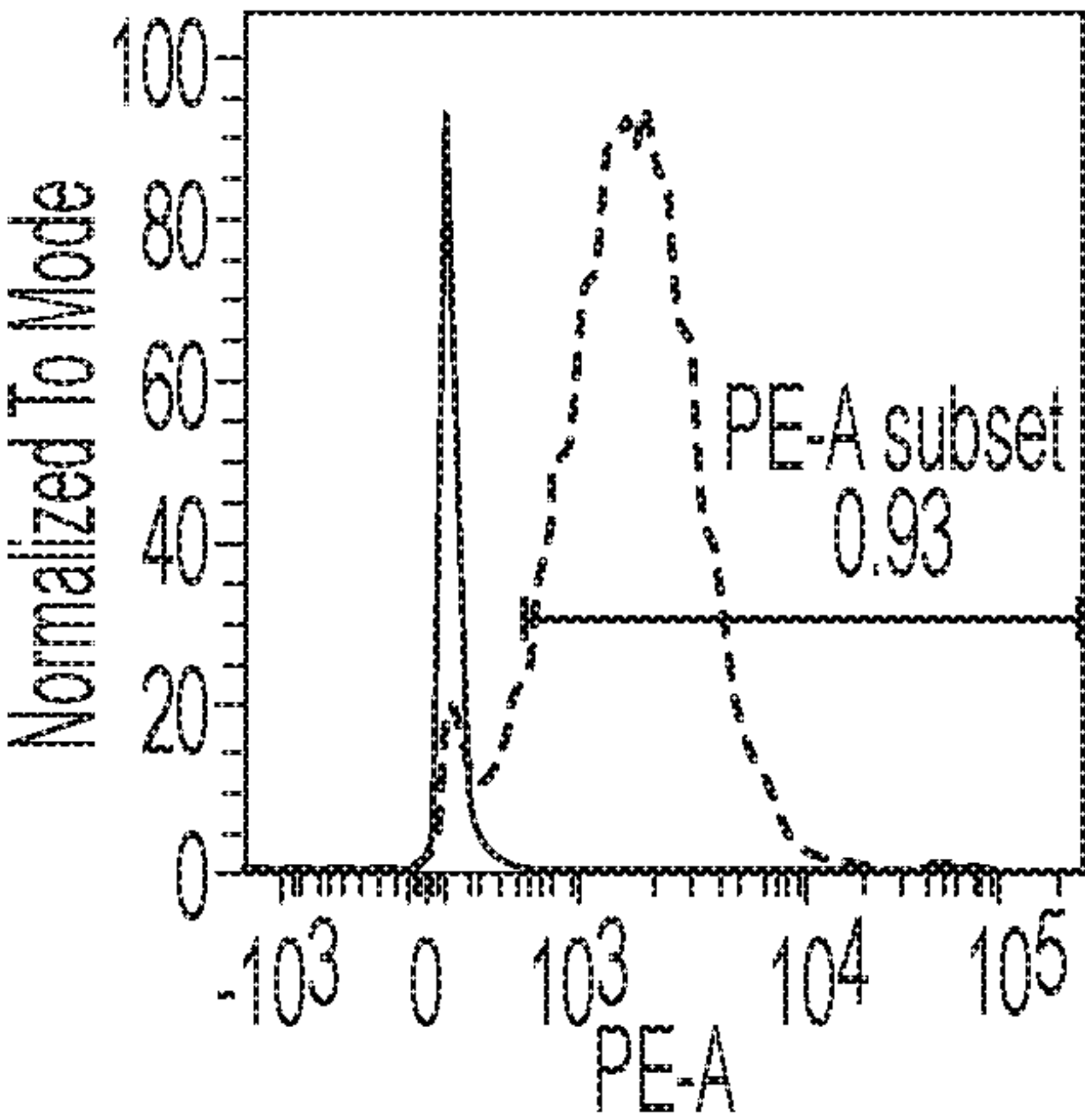
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FIG. 2D

CHO-DLL3

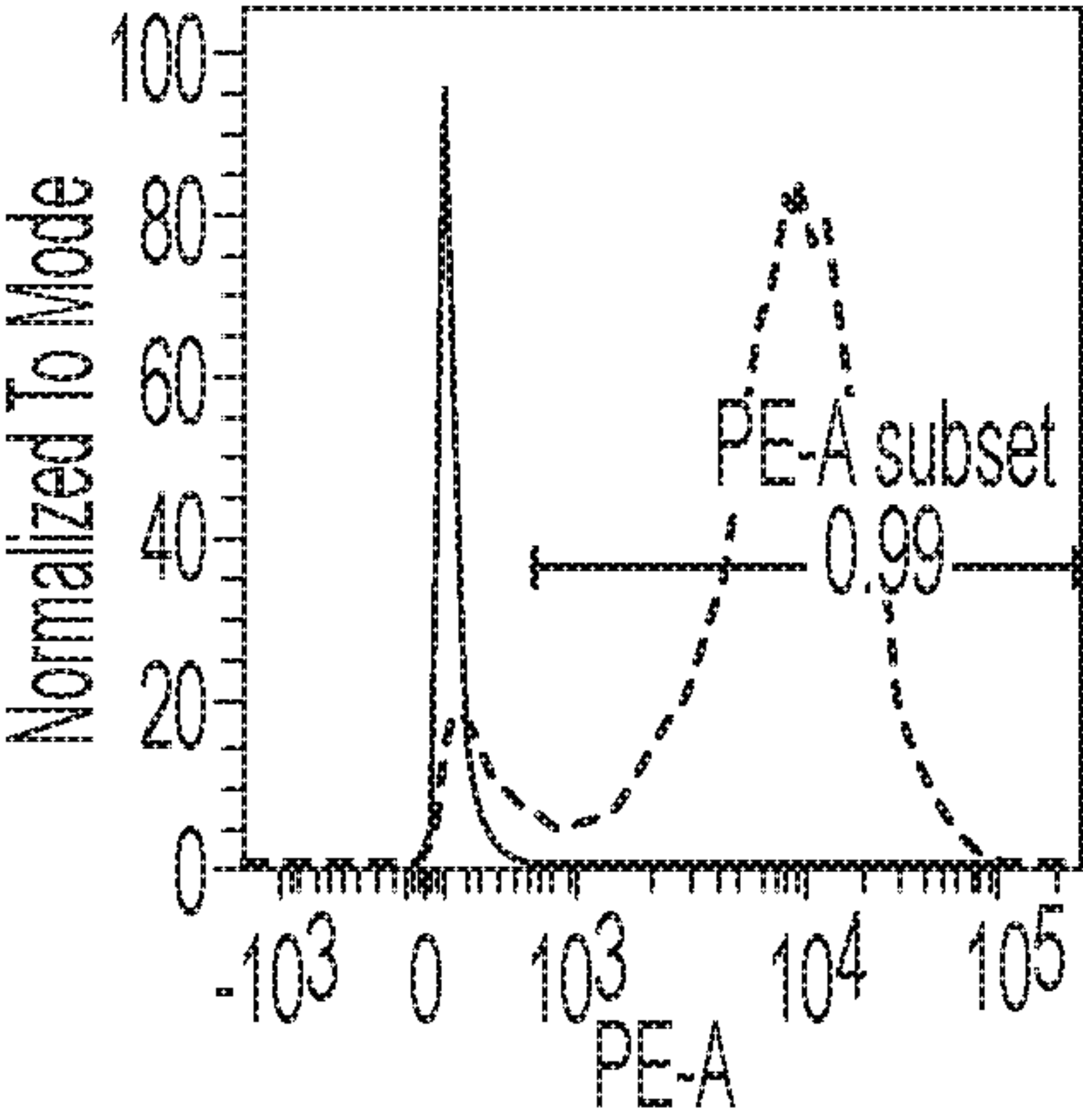
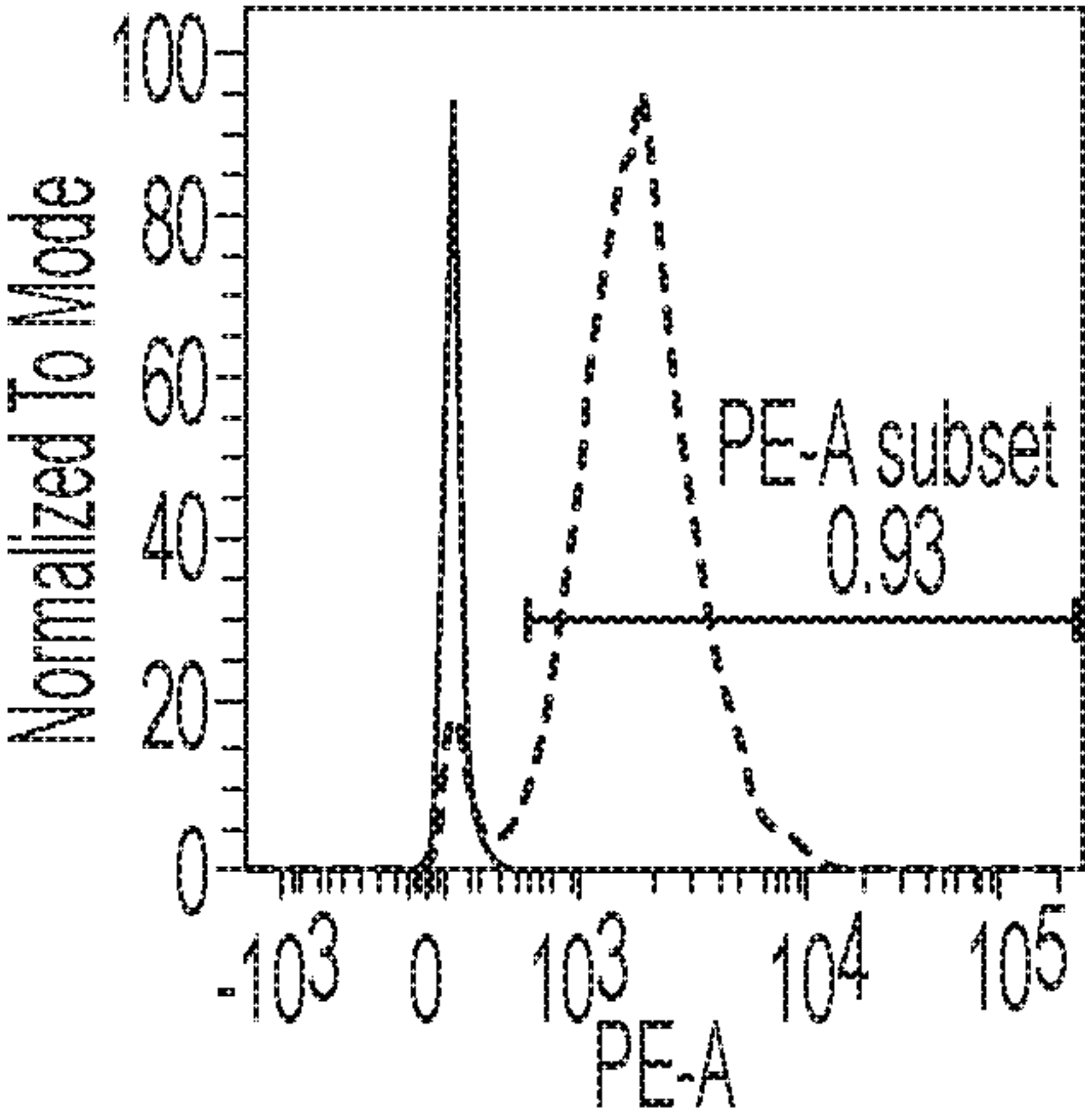
Complete ECD

DSL-EGF6

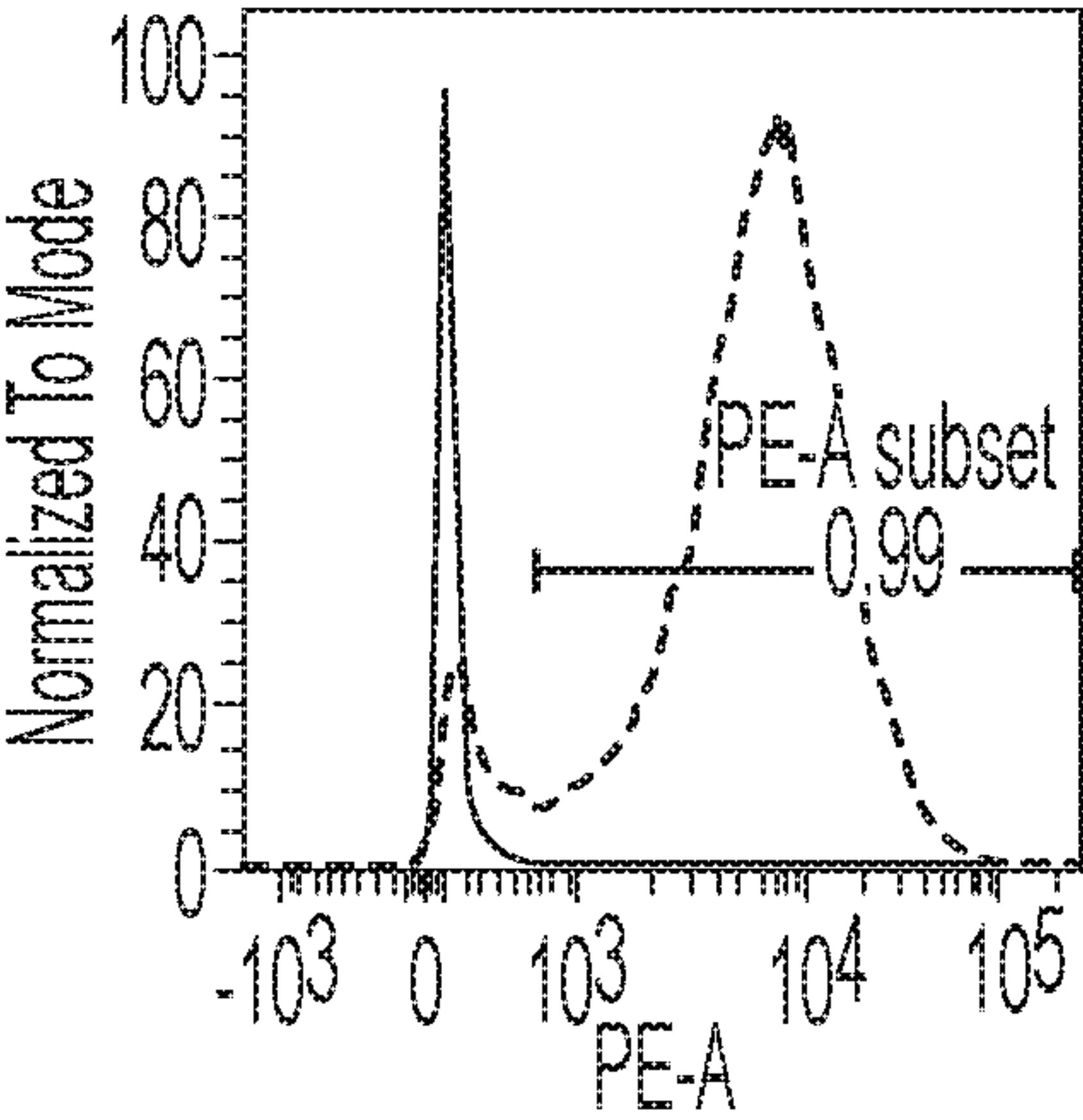
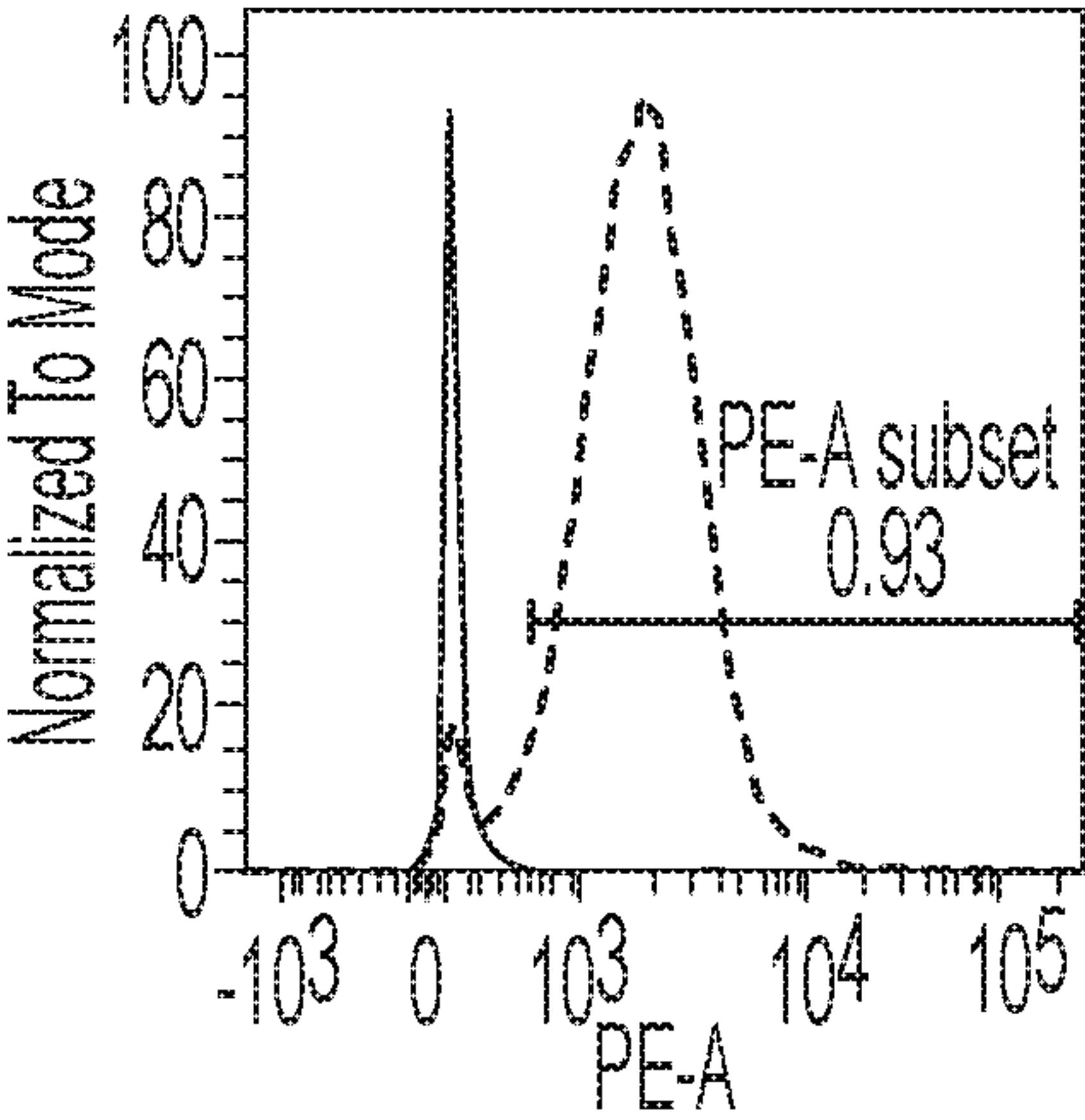
5E12



6D8



26C8



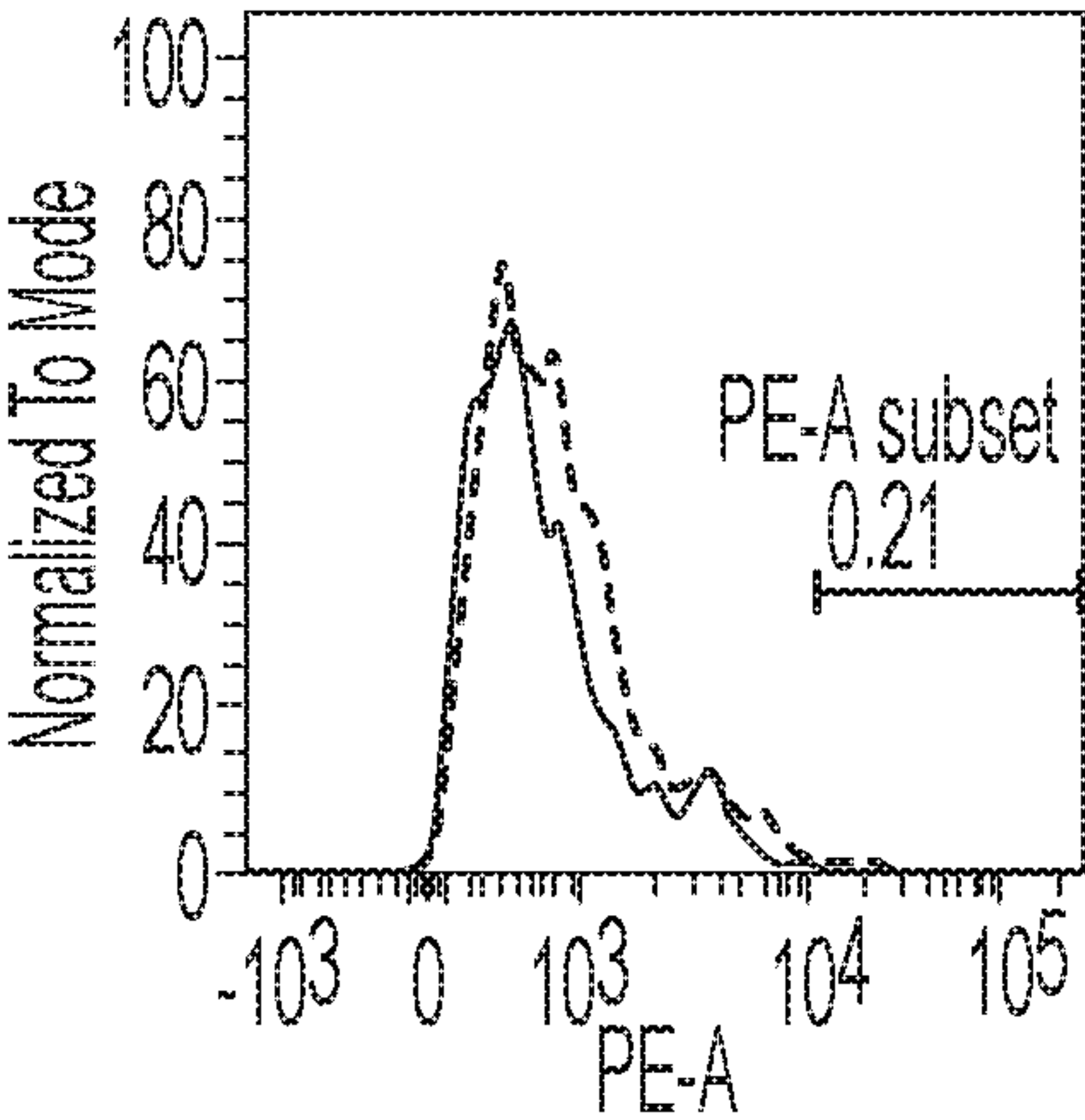
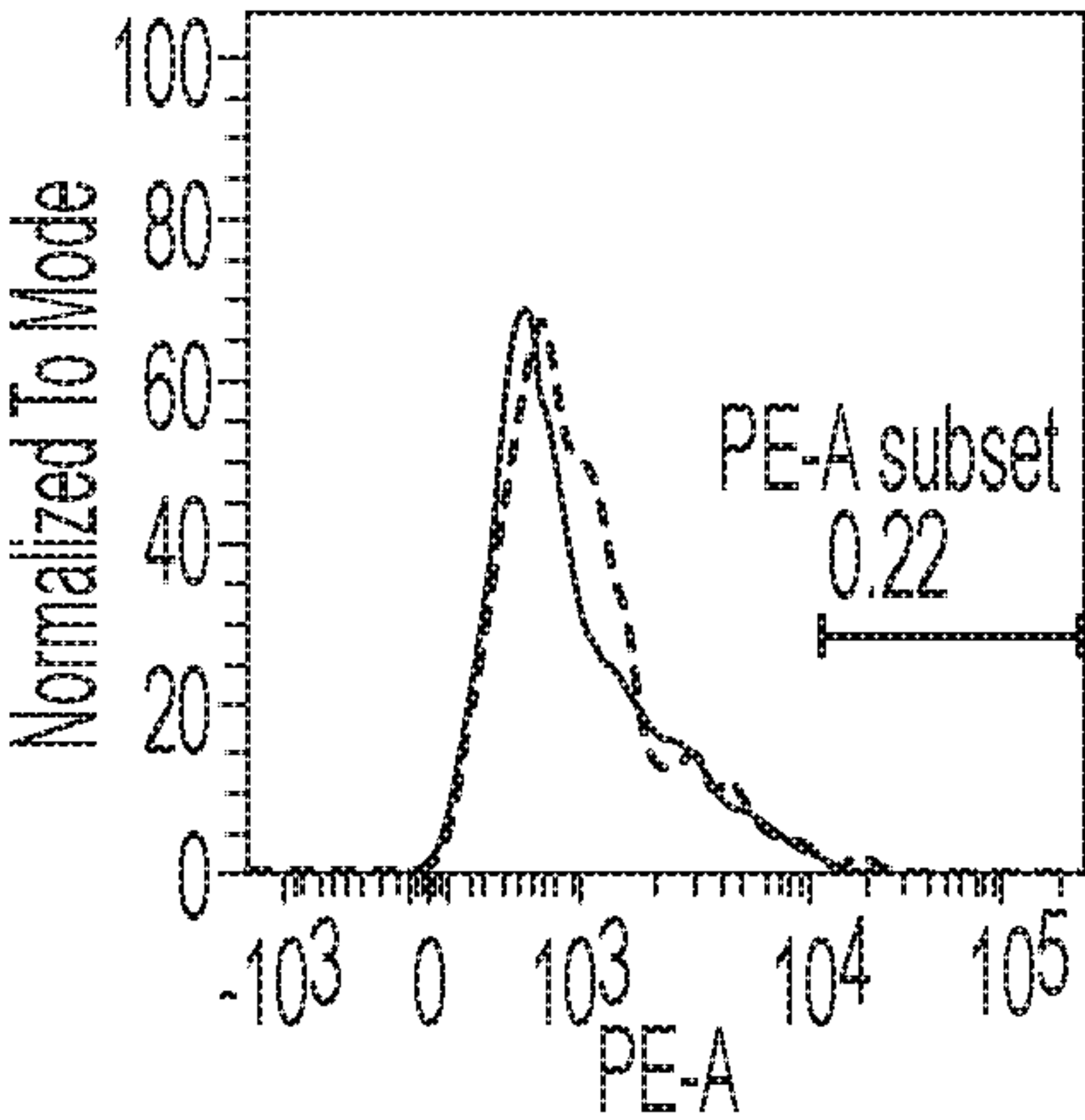
7/42
FIG. 2D
CONTINUED

CHO-DLL3

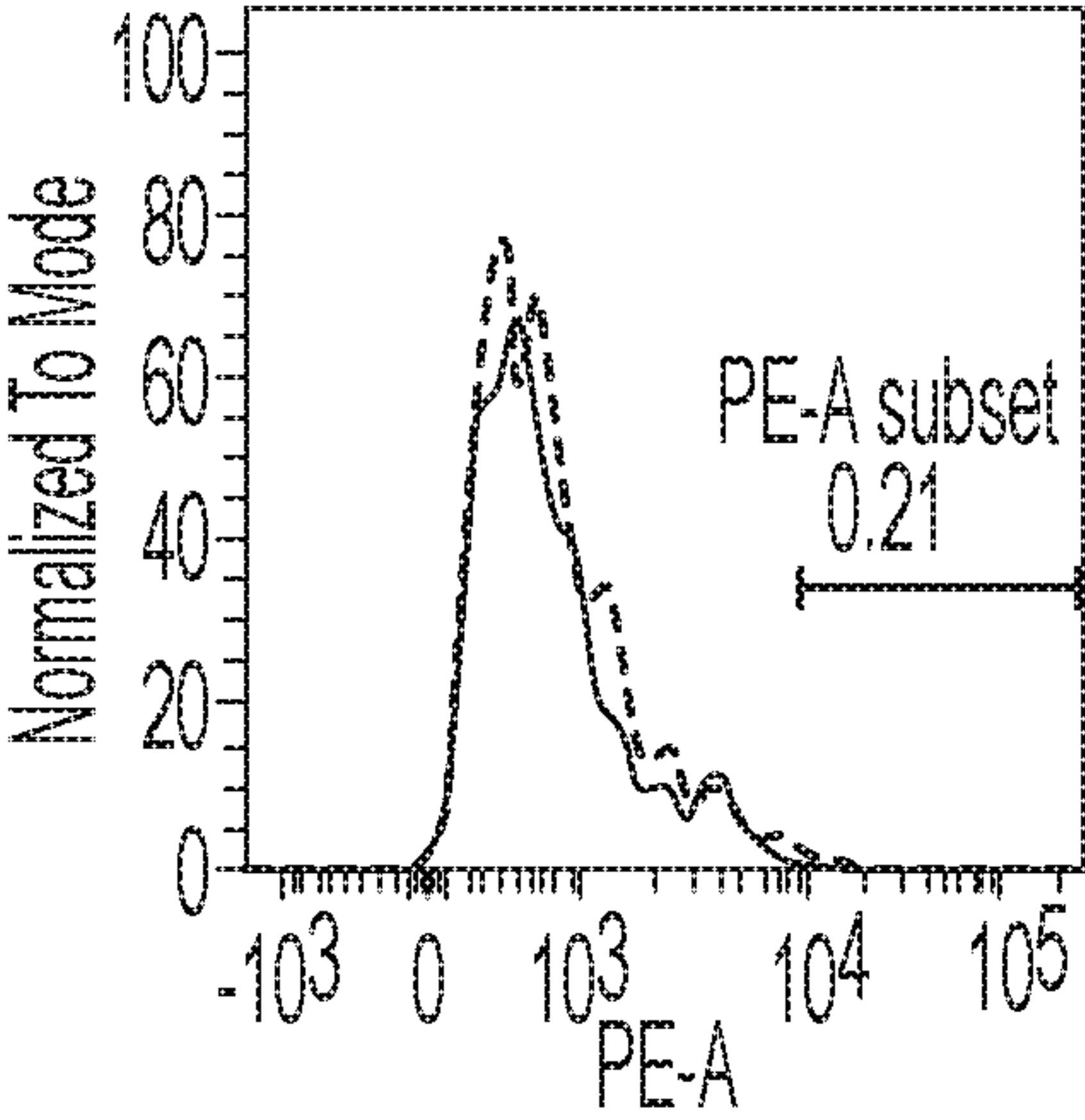
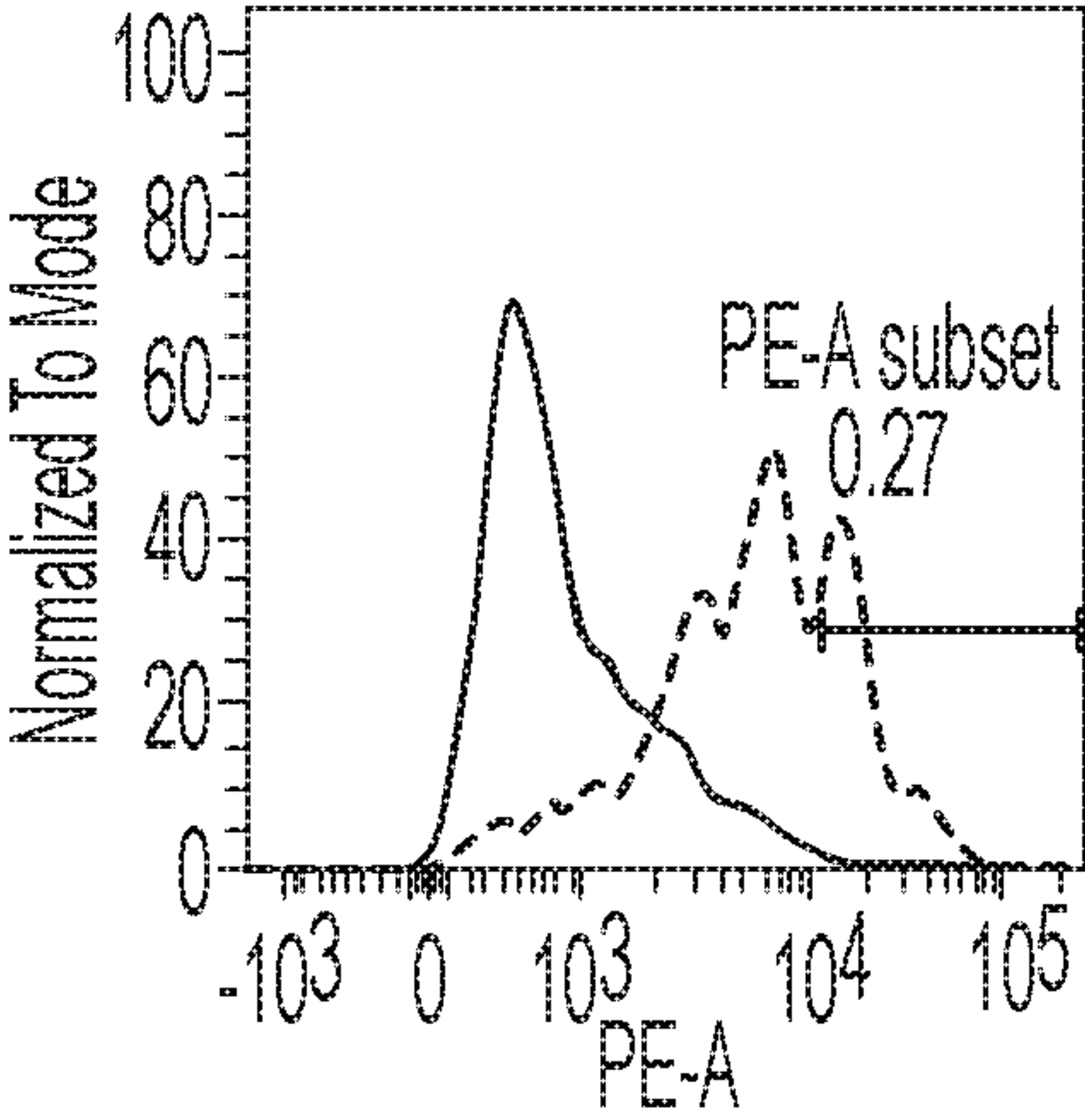
EGF1-EGF6

EGF2-EGF6

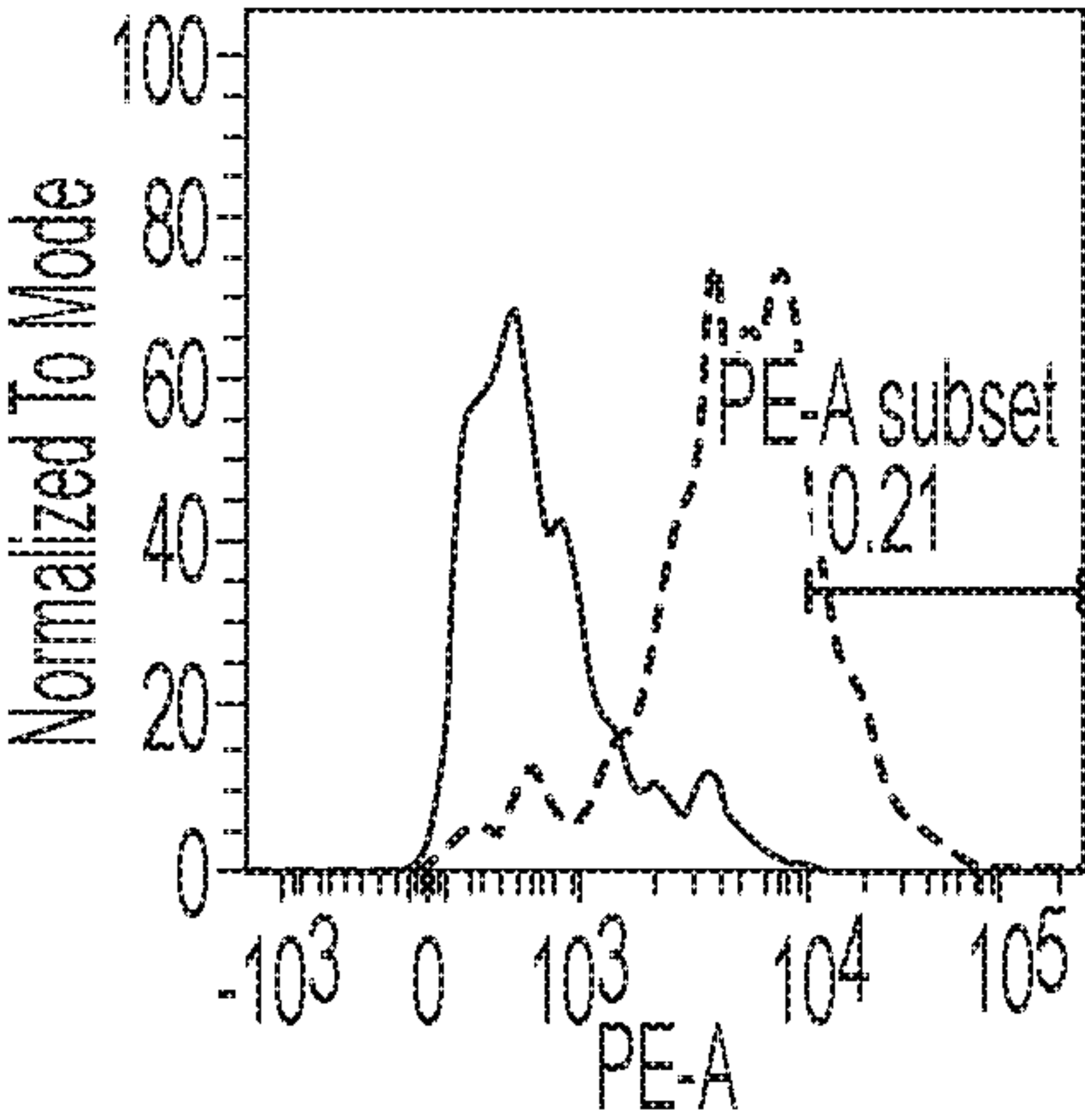
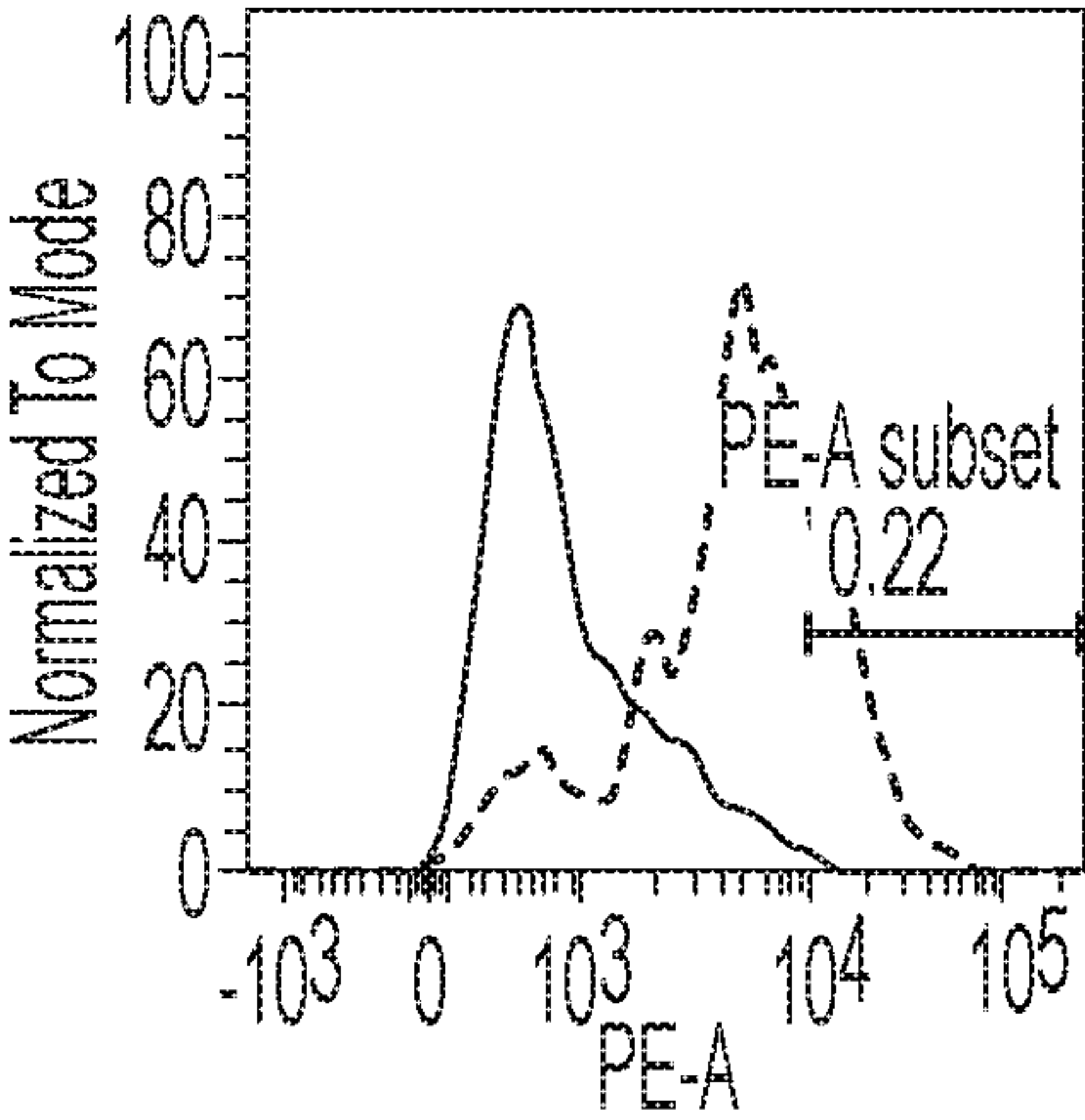
5E12



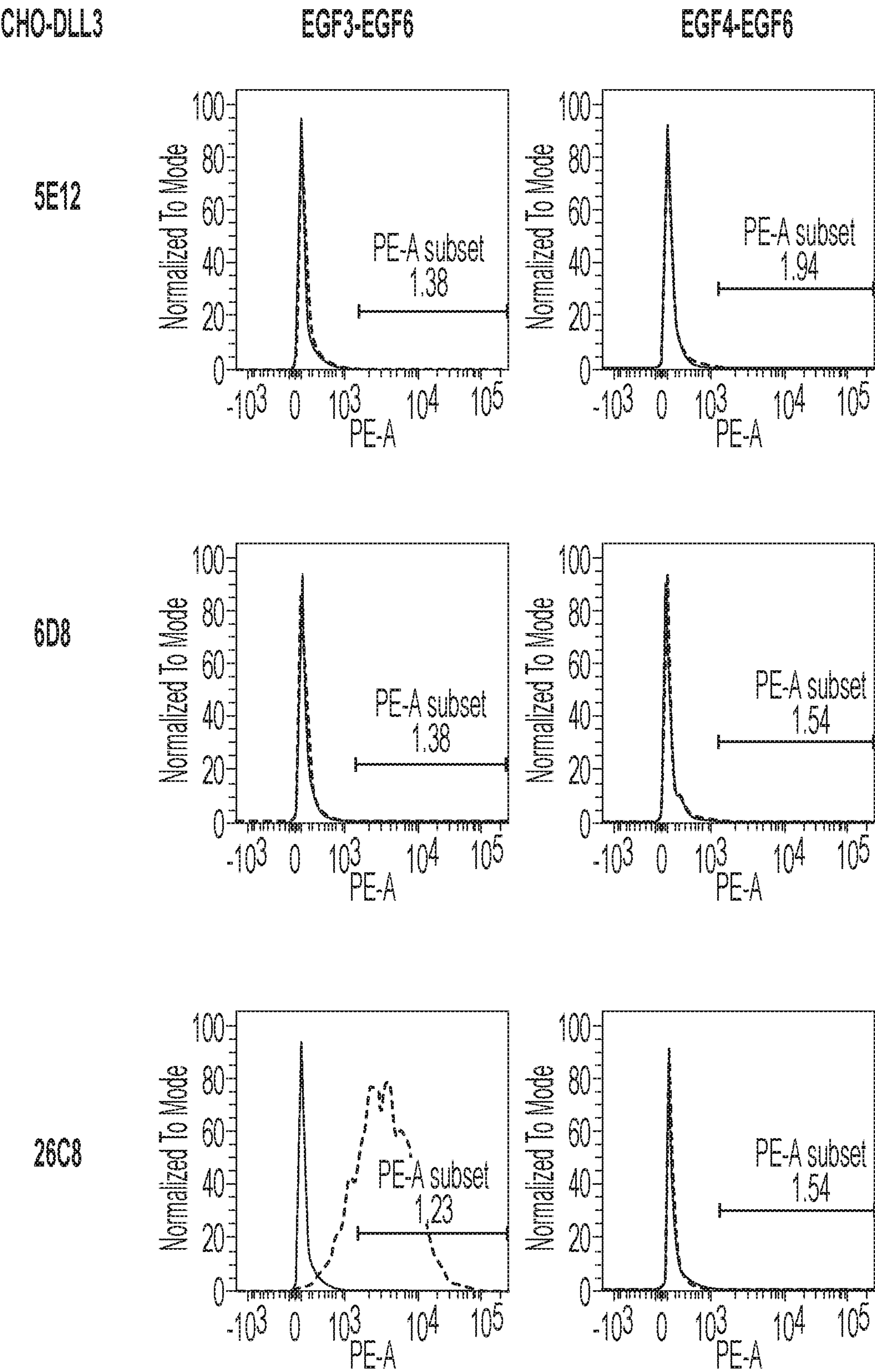
6D8



26C8



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FIG. 2D
CONTINUED



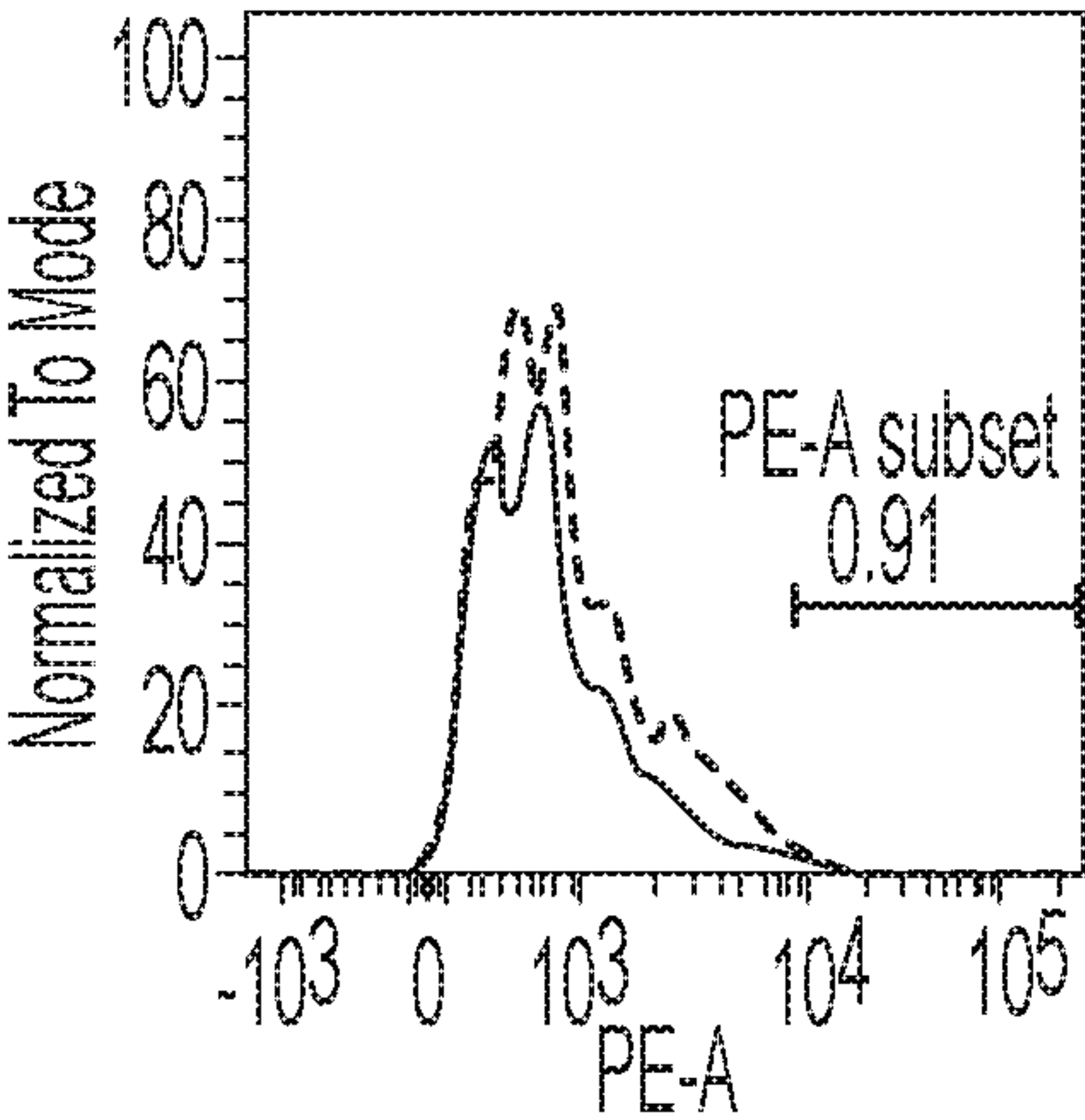
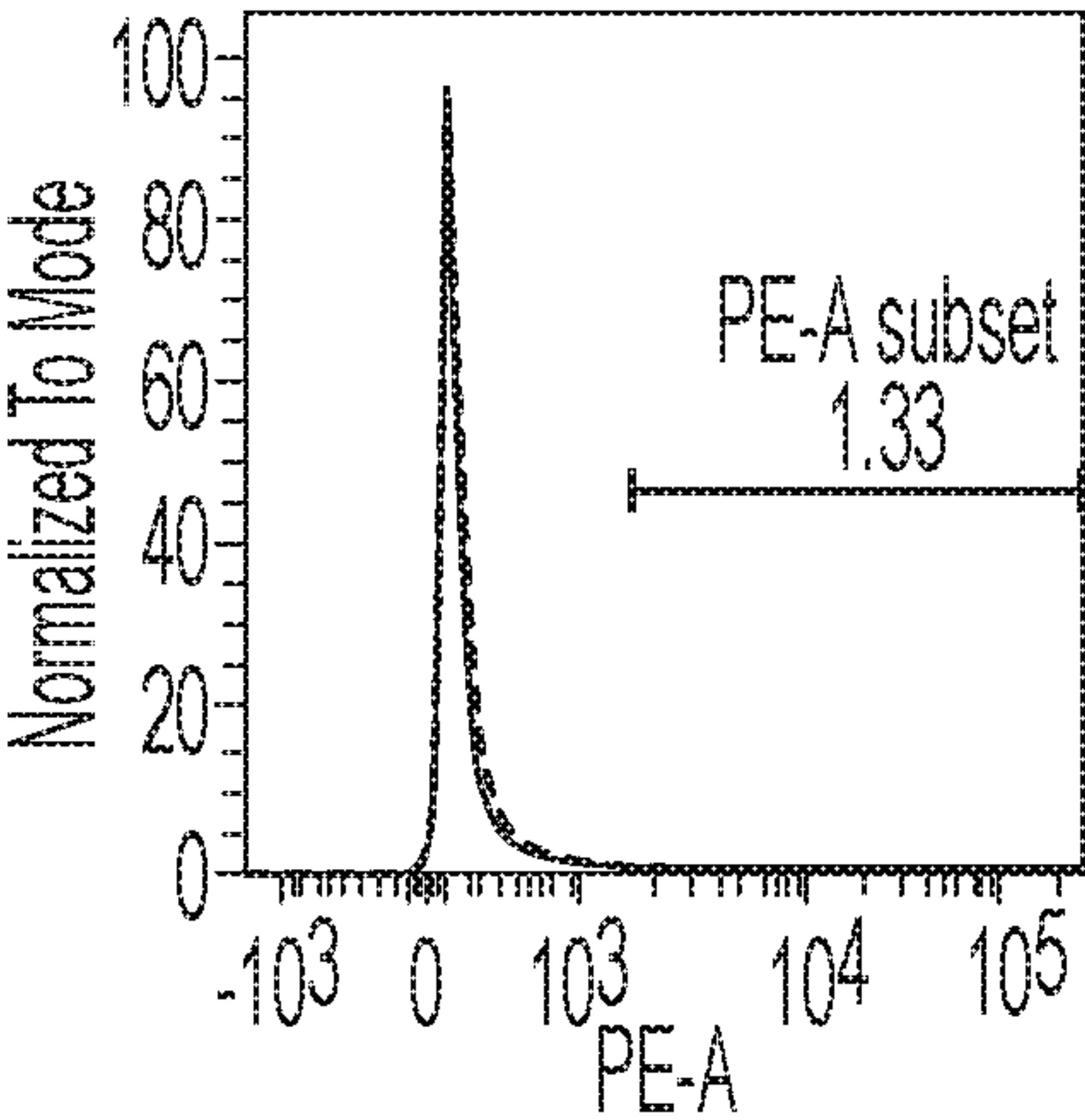
9/42
FIG. 2D
CONTINUED

CHO-DLL3

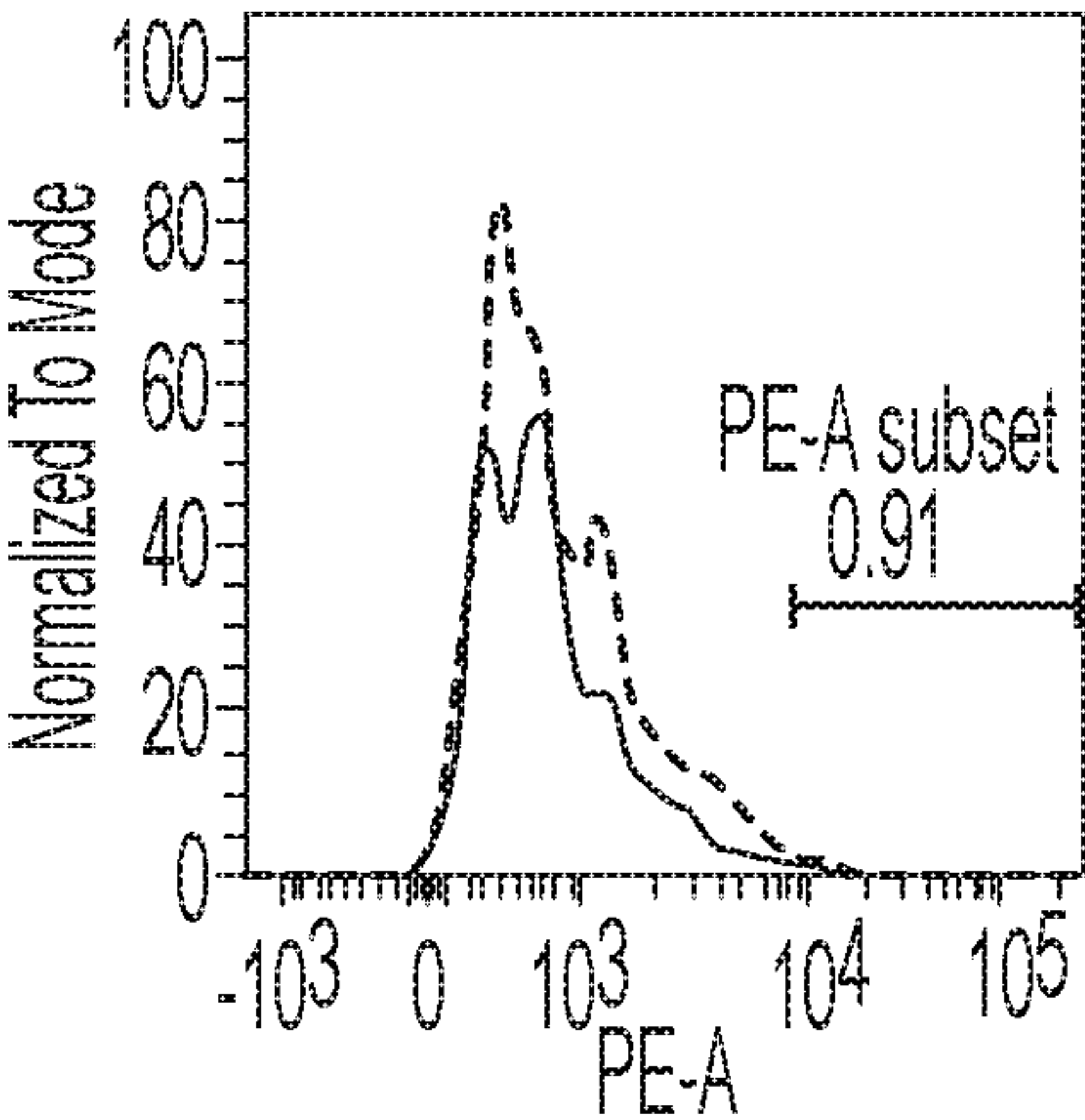
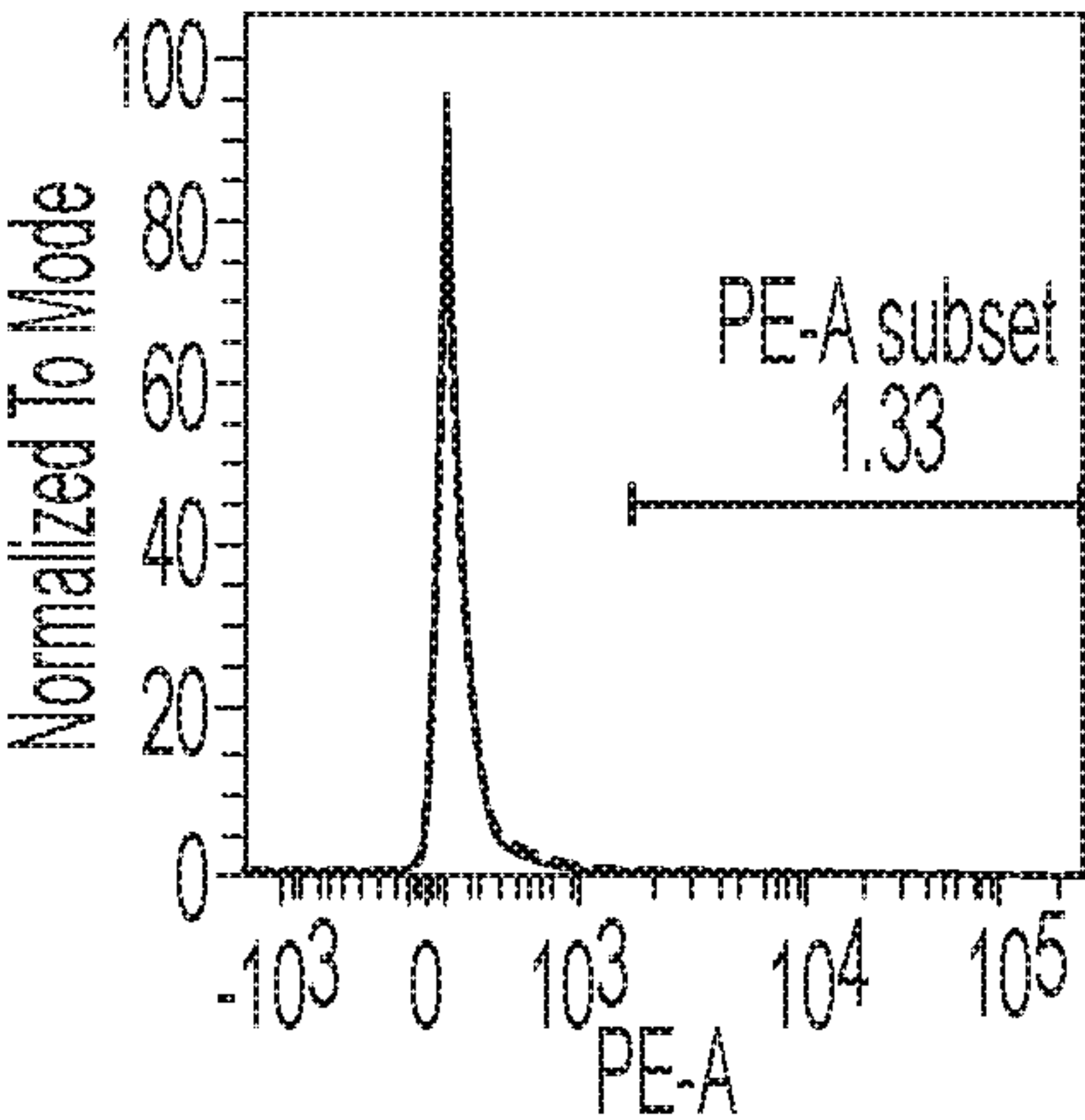
EGF5-EGF6

EGF6

5E12



6D8



26C8

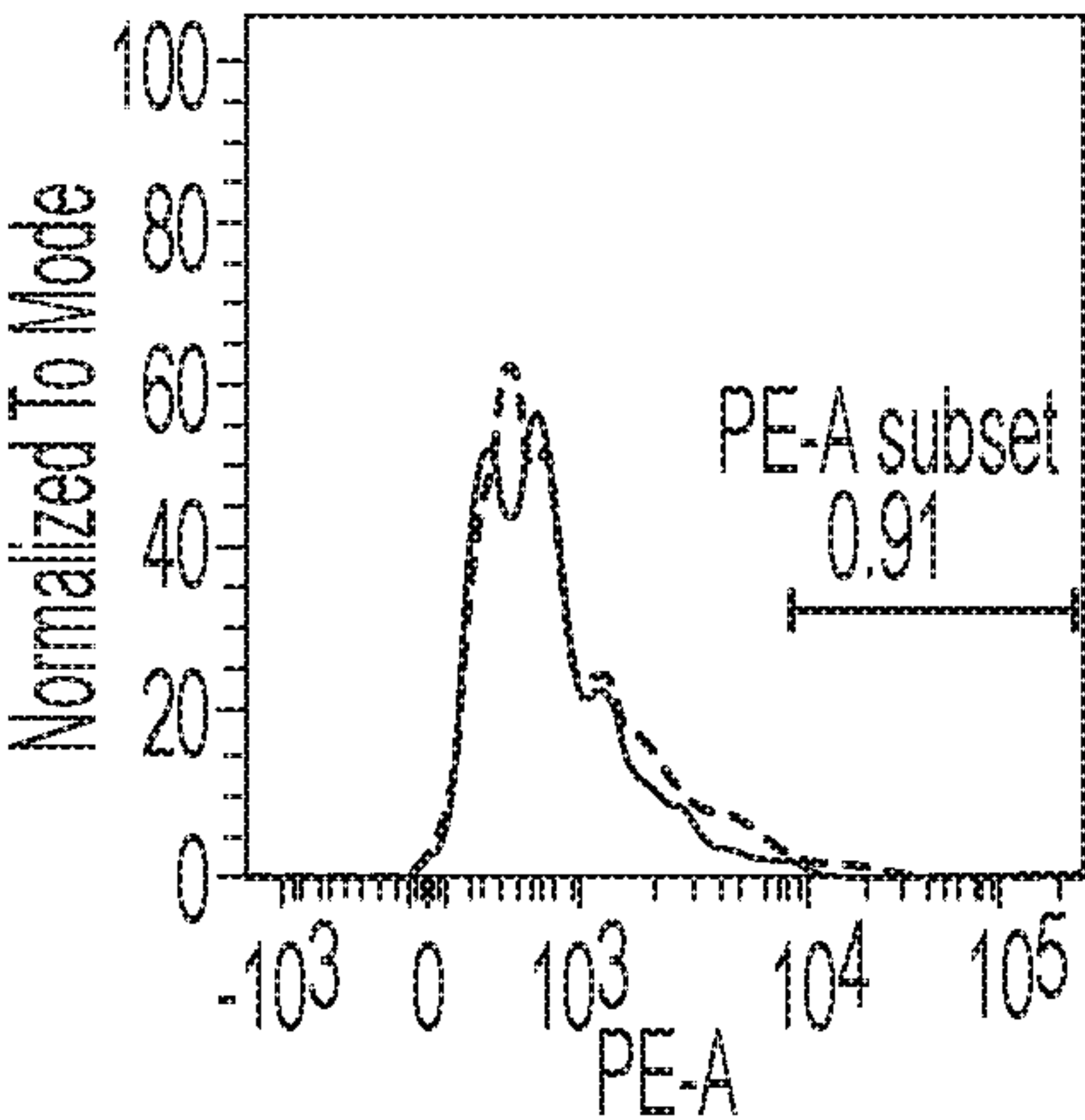
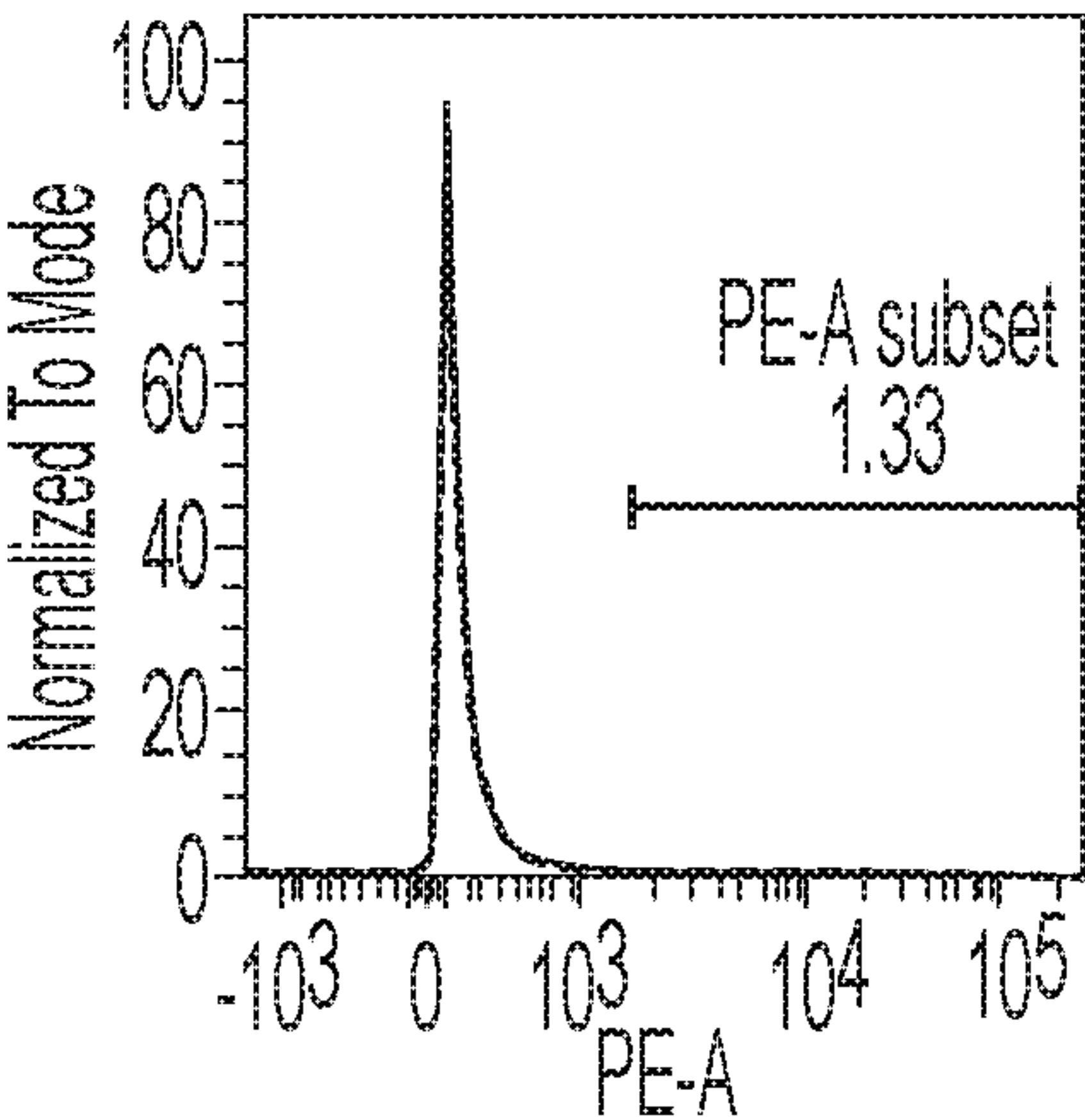


FIG. 3A

DLL3 CAR domain structure

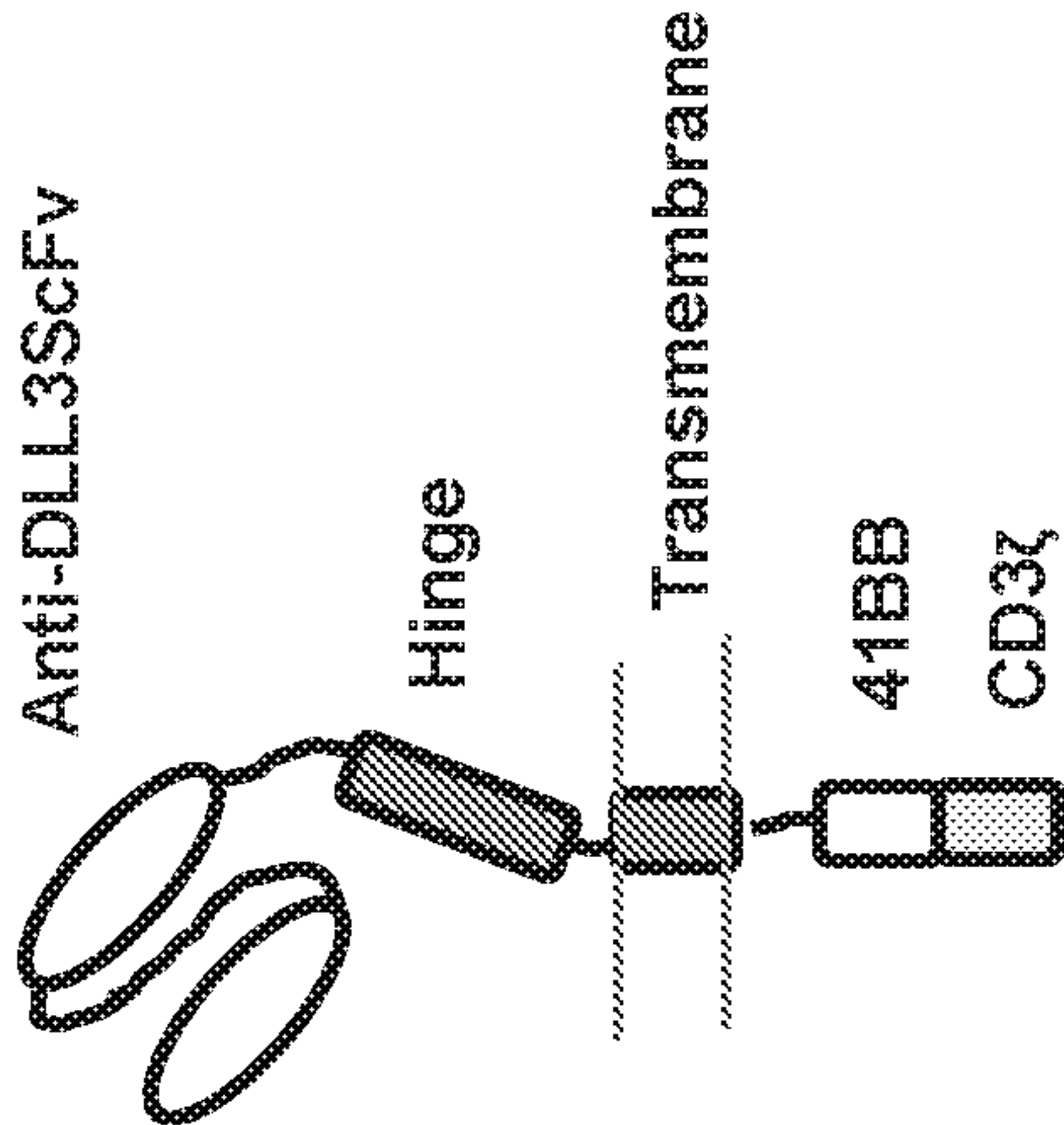
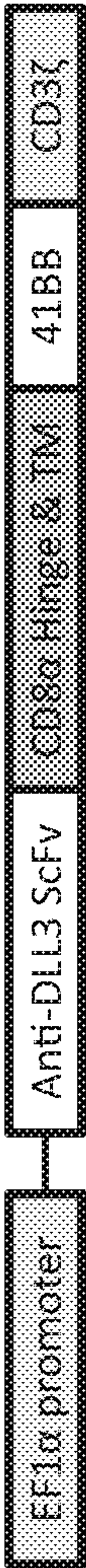


FIG. 3B

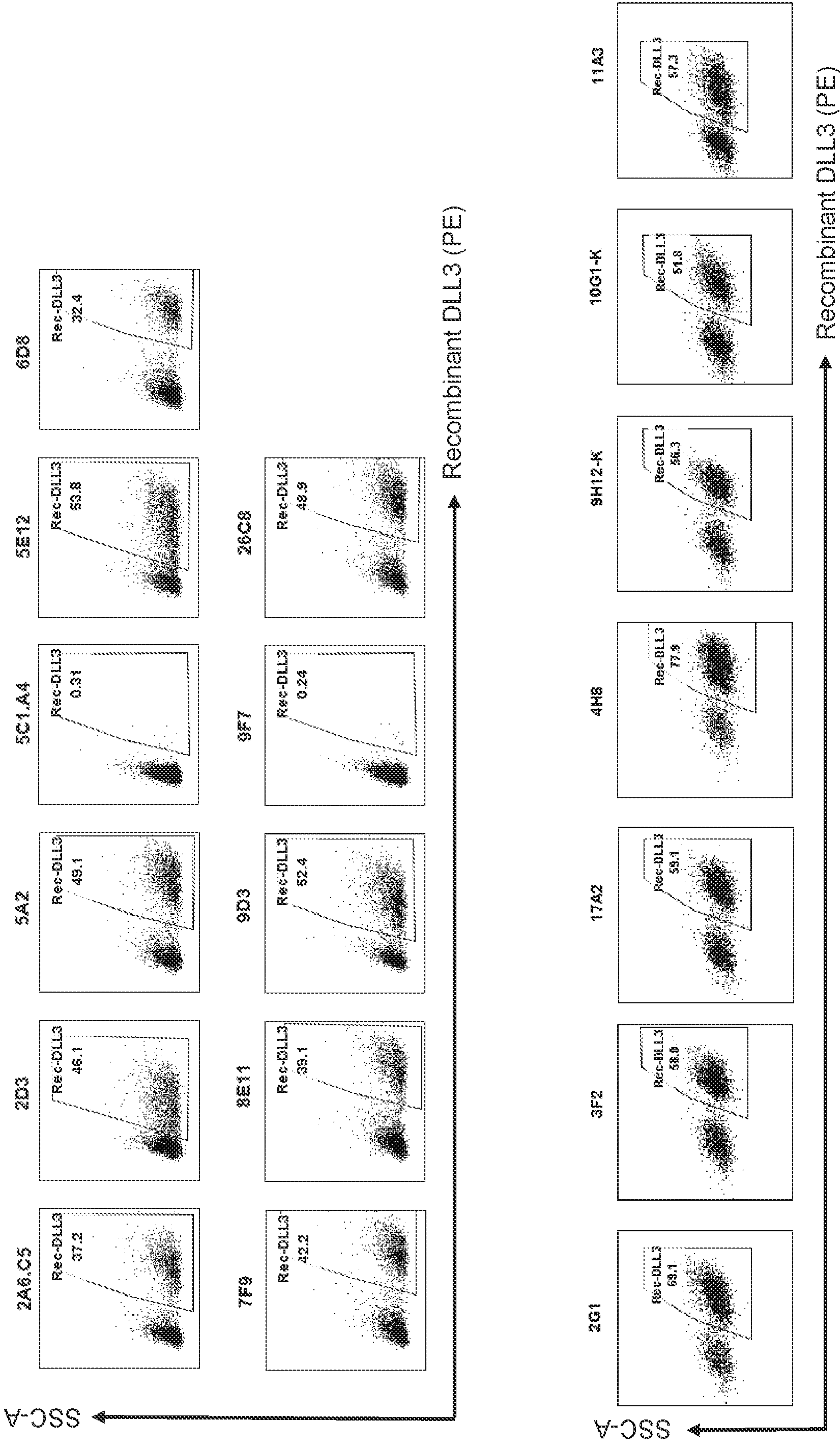


FIG. 3C

Clone	Transduction efficiency (Donor 116)	Transduction efficiency (Donor 117)
2A6.C5	37.2 %	37.7 %
2D3	46.1 %	47.4 %
5A2	49.1 %	47.4 %
5C1.A4	0.31 %	NA
5E12	53.8 %	49.1 %
6D8	32.4 %	34.8 %
7F9	42.2 %	37.4 %
8E11	39.1 %	41.4 %
9D3	52.4 %	50.8 %
9F7	0.24 %	0.15 %
26C8	48.9 %	46.9 %

Clone	Transduction efficiency (Donor 116)	Transduction efficiency (Donor 419)
2C3	31.0 %	22.7 %
2G1	66.9 %	49.1 %
3E4	58.3 %	46.4 %
3F2	16.3 %	12.2 %
4F9	67.5 %	49.4 %
4G9	48.9 %	35.2 %
6H1	5.81 %	2.70 %
6H5	<0.1%	<0.1%
10D1	<0.1%	<0.1%
11F6	15.2 %	4.08 %
11H7	52.4 %	40.2 %
16H7	42.7 %	27.1 %
17A2	68.6 %	43.3 %

FIG. 3D

Clone	Transduction efficiency (Donor 503)	Transduction efficiency (Donor 772)	Transduction efficiency (Donor 419)	Transduction efficiency (Donor 503)
4H5	<0.1%	<0.1%	57.3%	65.8%
6F8	59.4%	26.7%	2.35%	3.18%
3G6 - L1	35%	14.2%	36.7%	42.8%
3G6 - L2	33.5%	16.9%	6.01%	6.41%
4C6	56.9%	25.2%	<0.1%	<0.1%
3B9	<0.1%	<0.1%	6.15%	7.95%
4E6	37.8%	24.8%	<0.1%	<0.1%
3F9-L	19.5%	13.8%	54.8%	62.8%
4H8	39.3%	27.2%	NA	58.9%
3E10	<0.1%	0.43%	NA	0.11%
3C3	<0.1%	0.14%	58.5%	67.6%
11F4	<0.1%	0.43%		
9H12-K	41.4%	35.6%		
10E12	<0.1%	0.98%		
10G1-K	53.7%	33.7%		
11A3	42.1%	20%	33.4%	45.1%

NA, not available

FIG. 4A

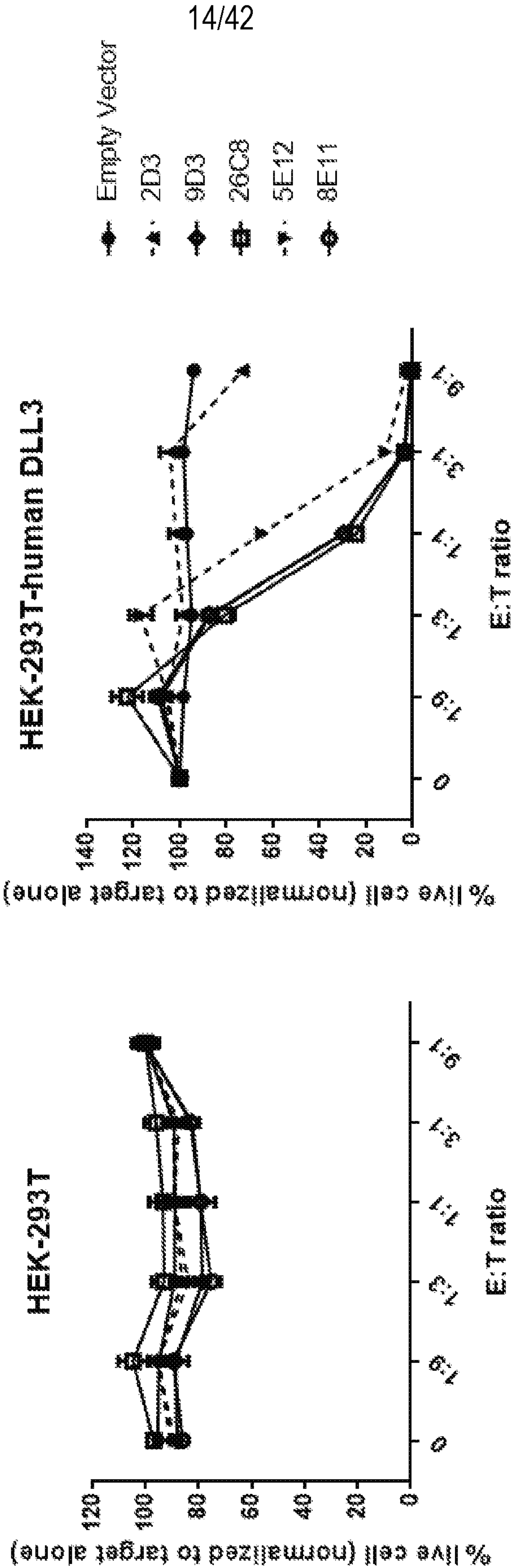


FIG. 4B

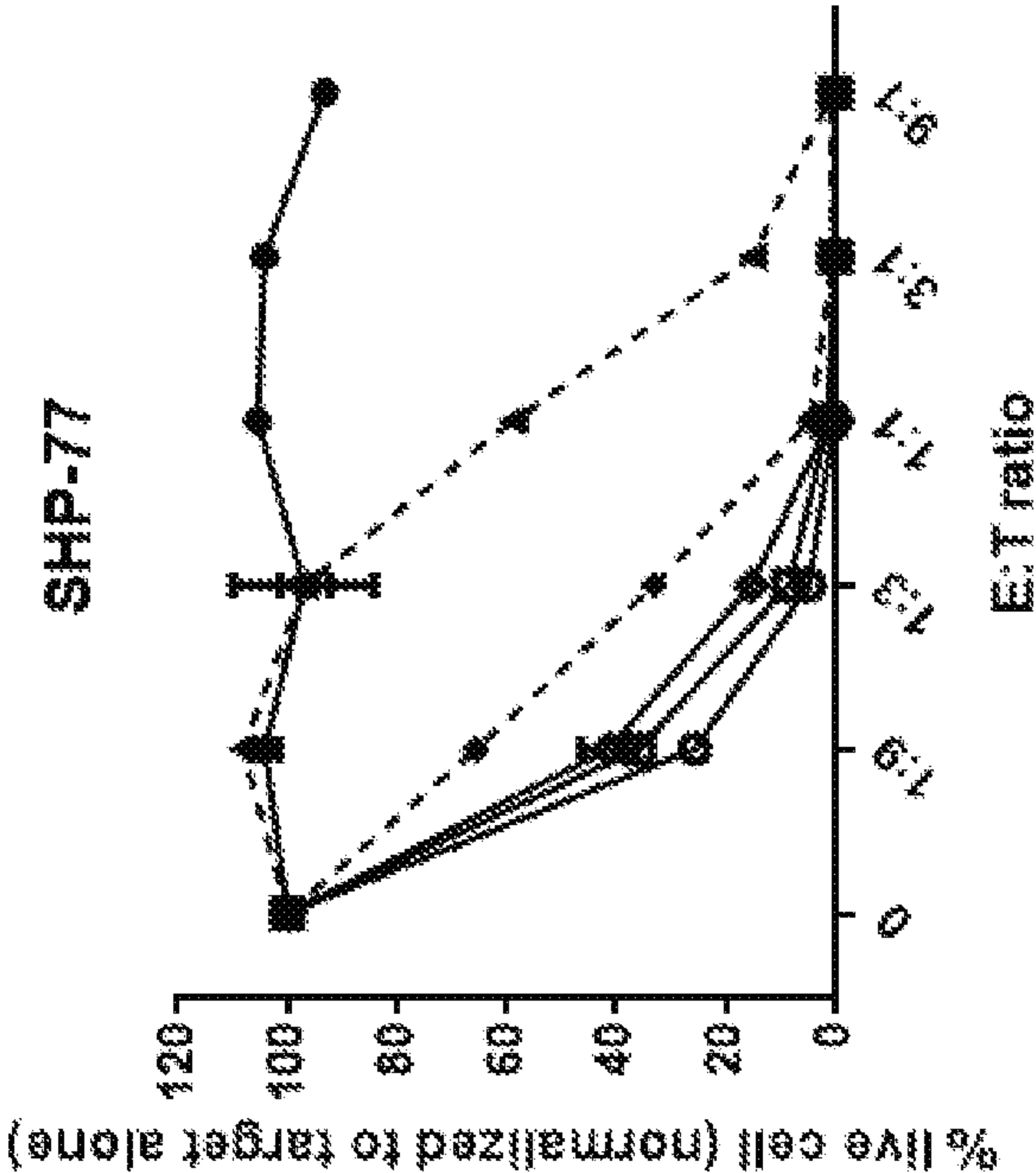
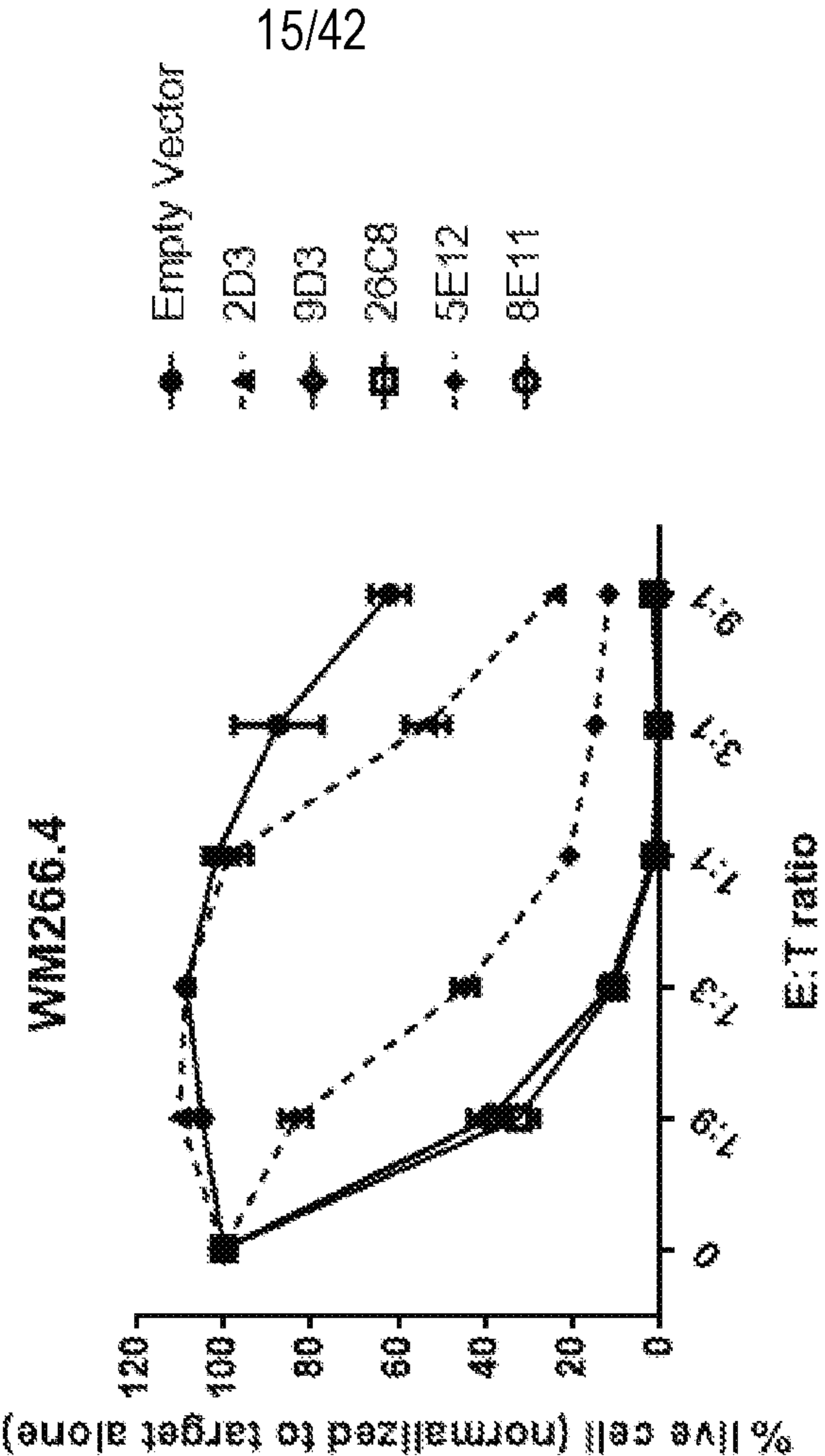


FIG. 4C

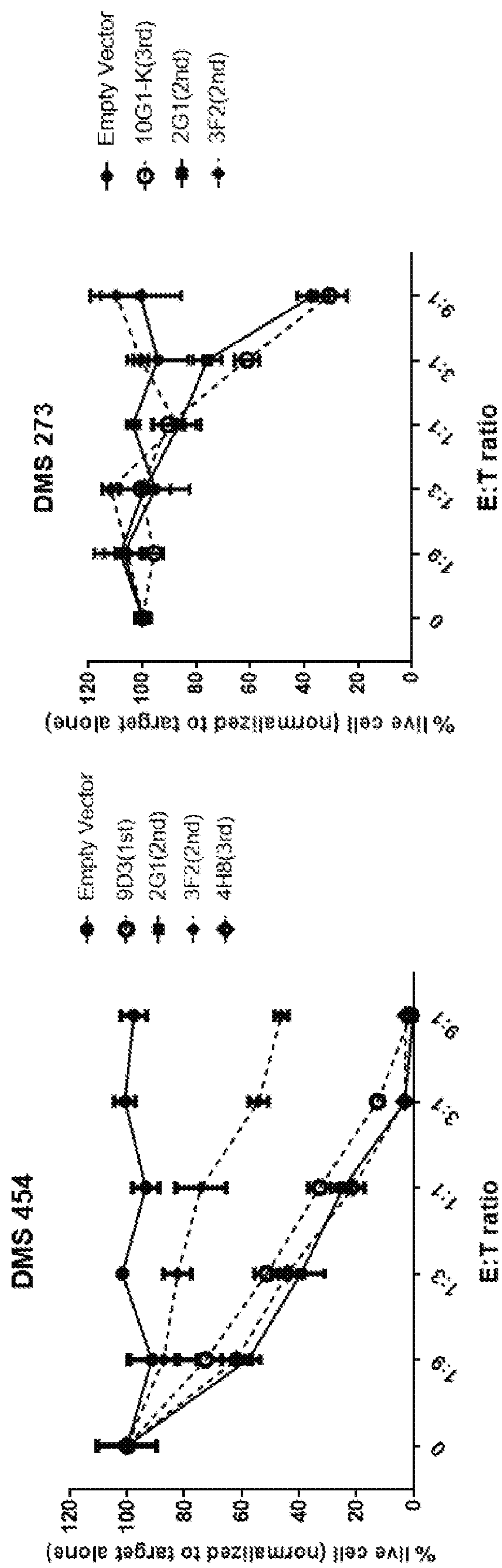


FIG. 5

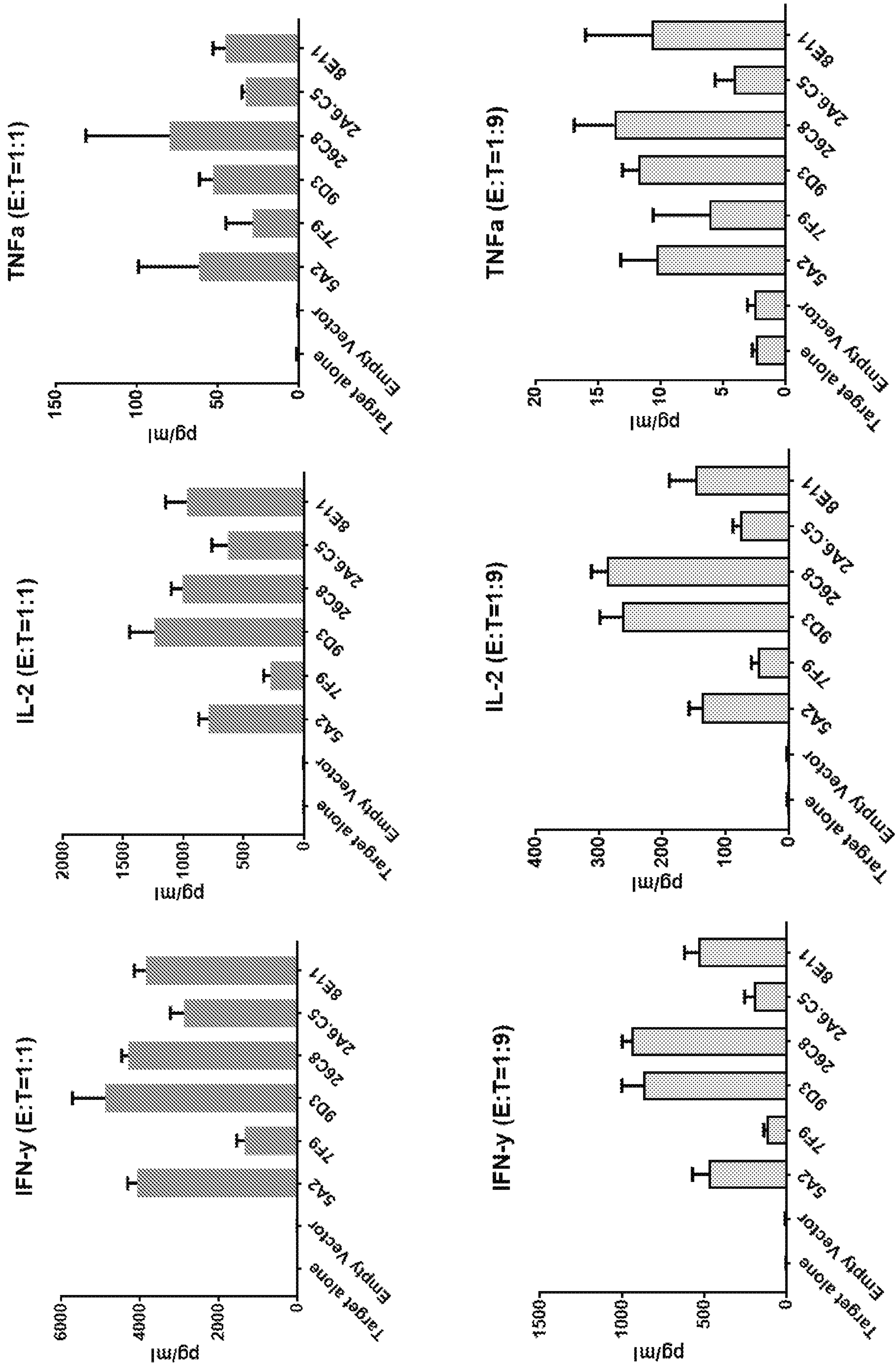


FIG. 6A

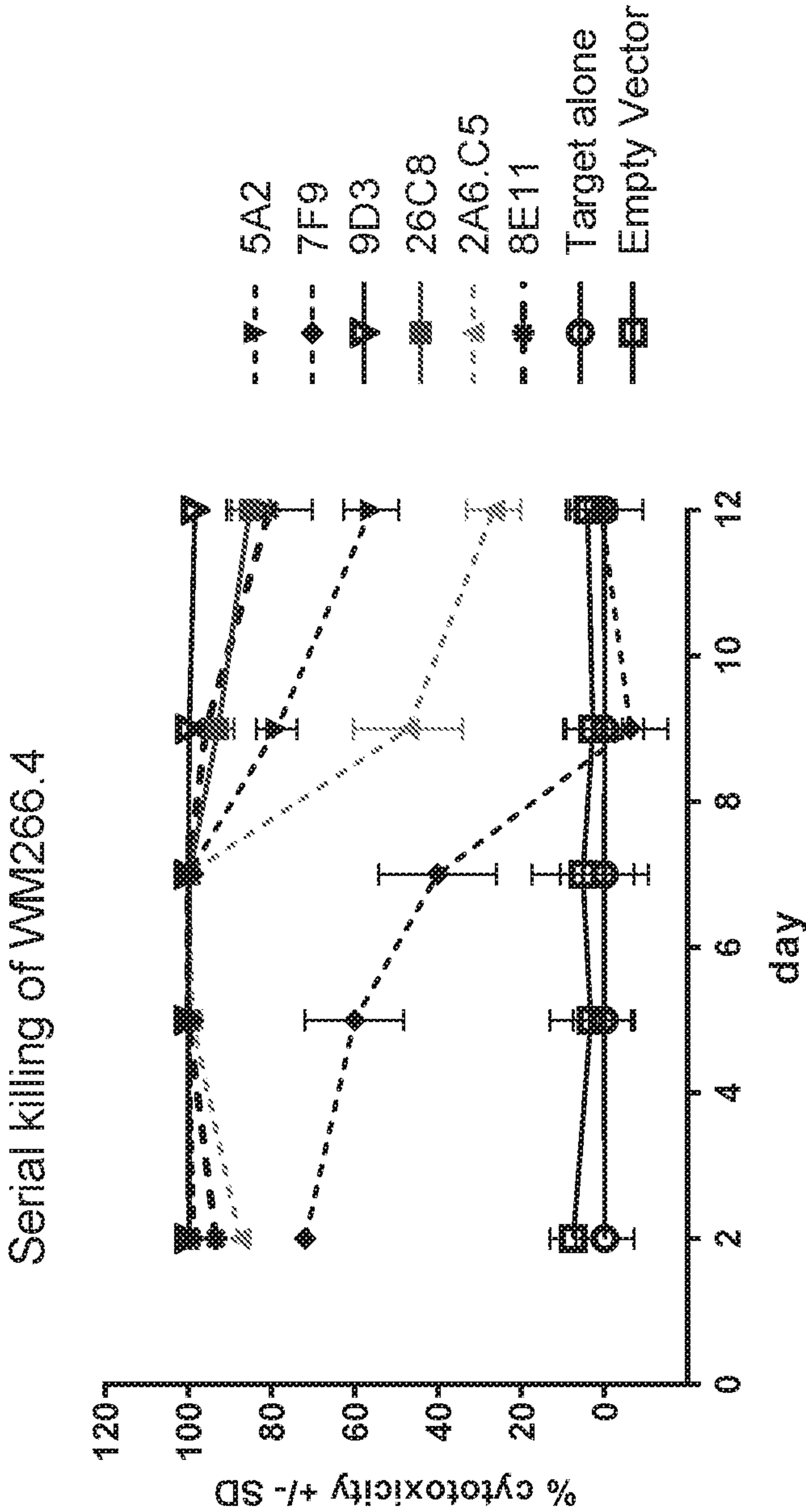


FIG. 6B

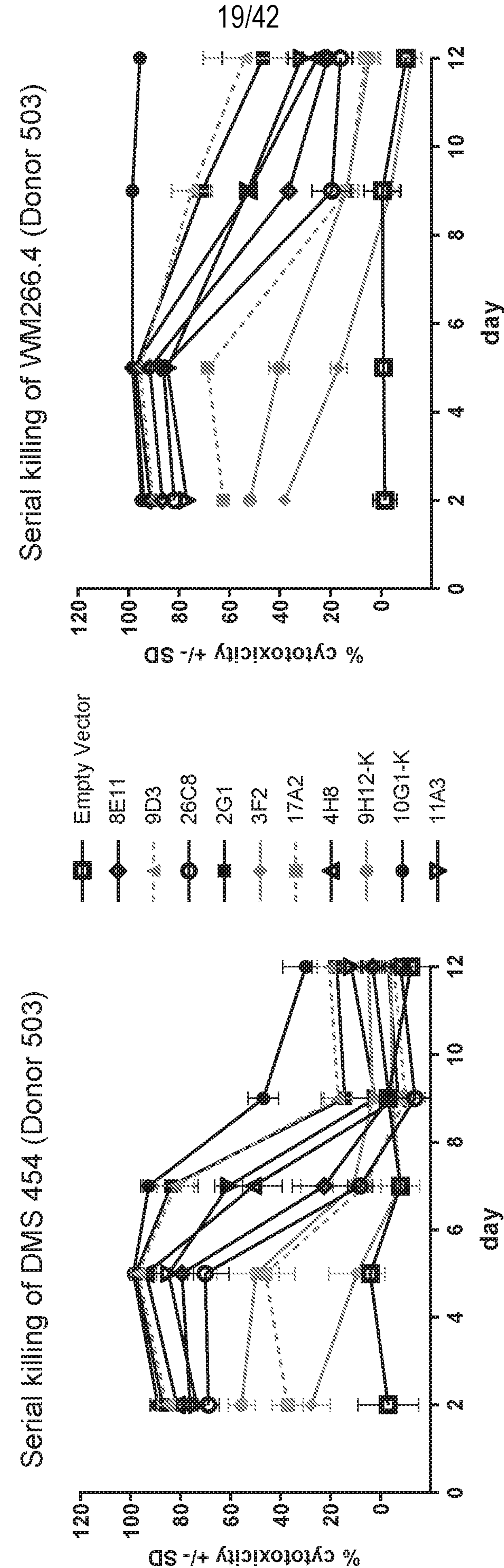


FIG. 6C

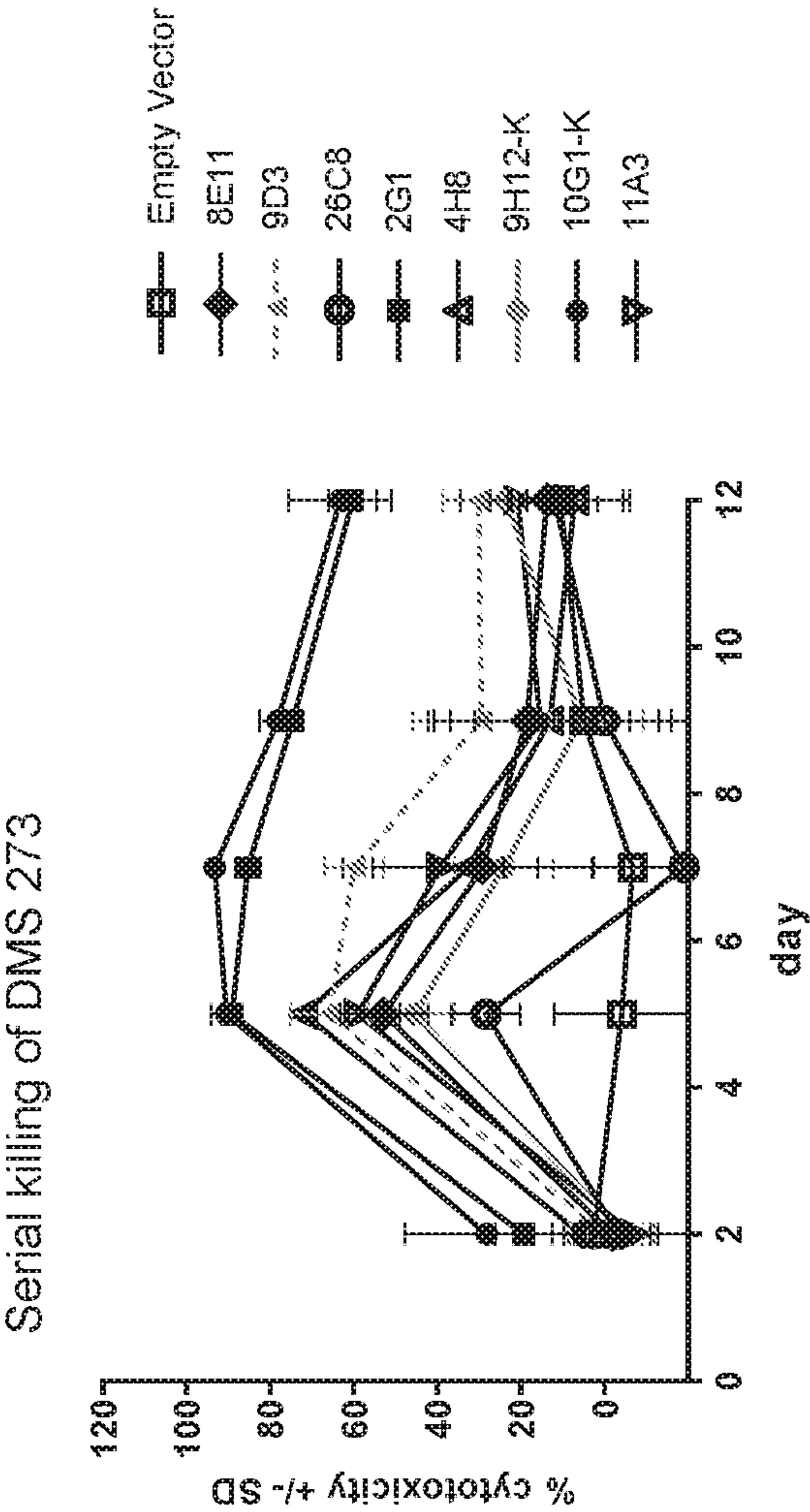


FIG. 7A

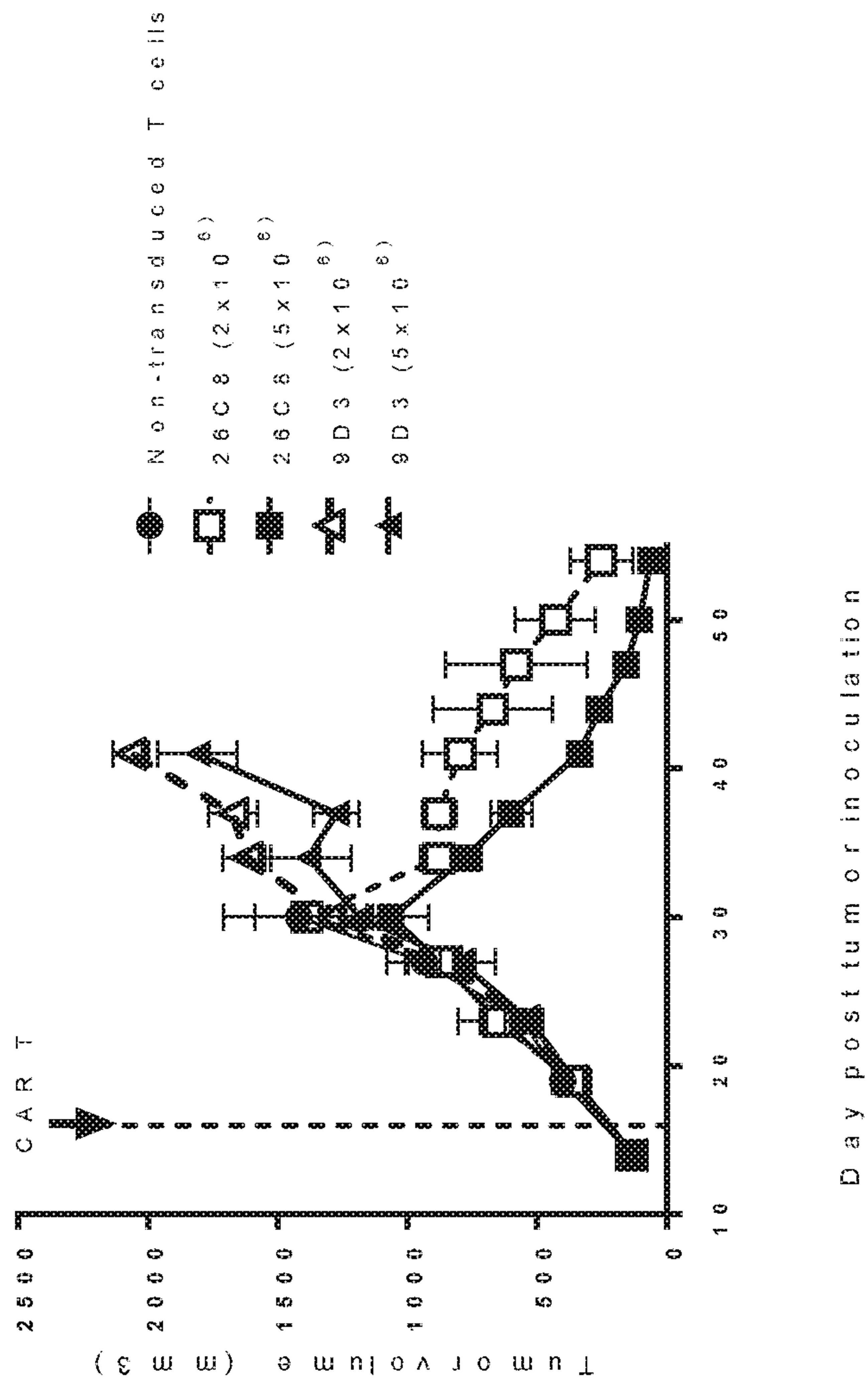


FIG. 7B

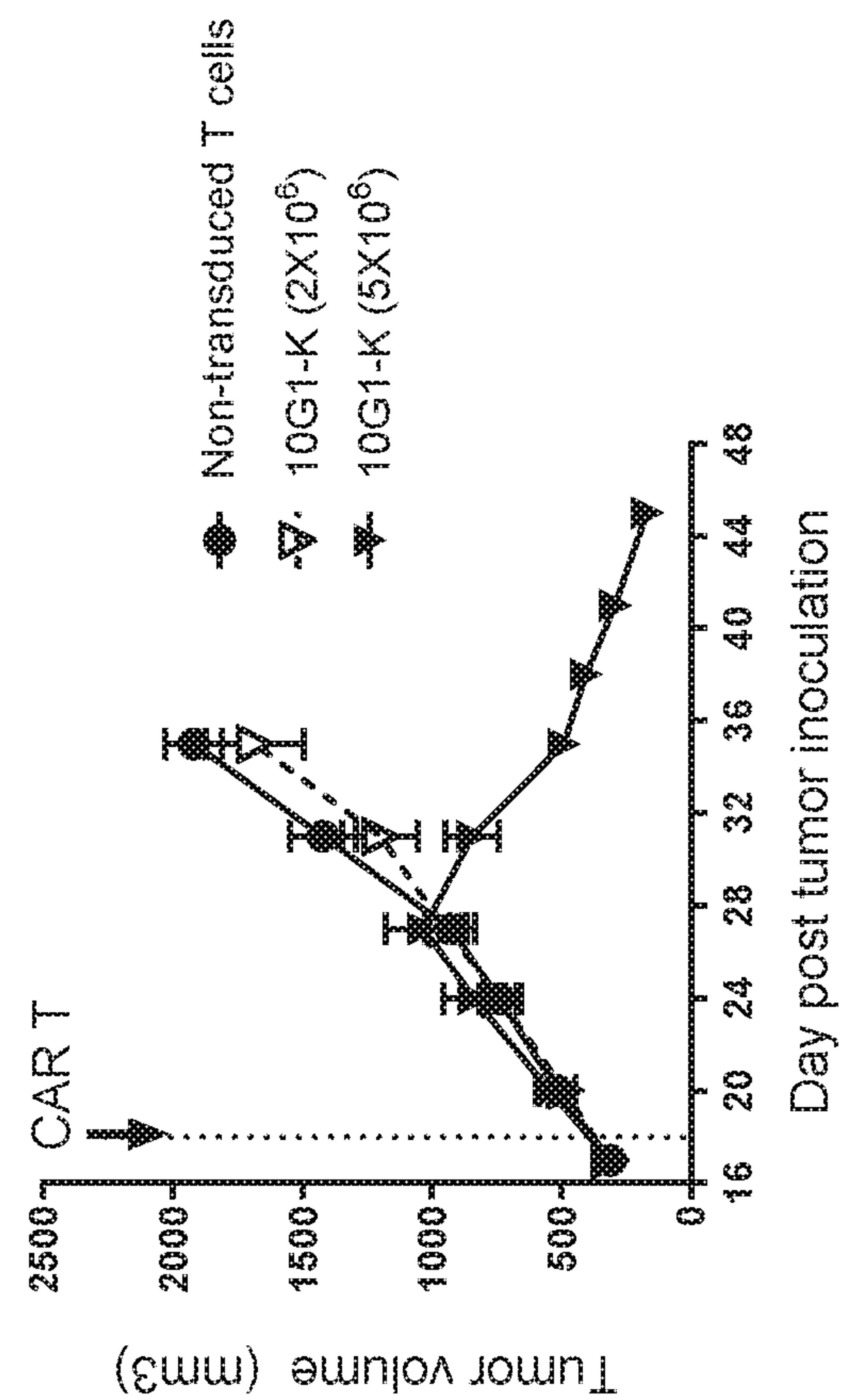


FIG. 8

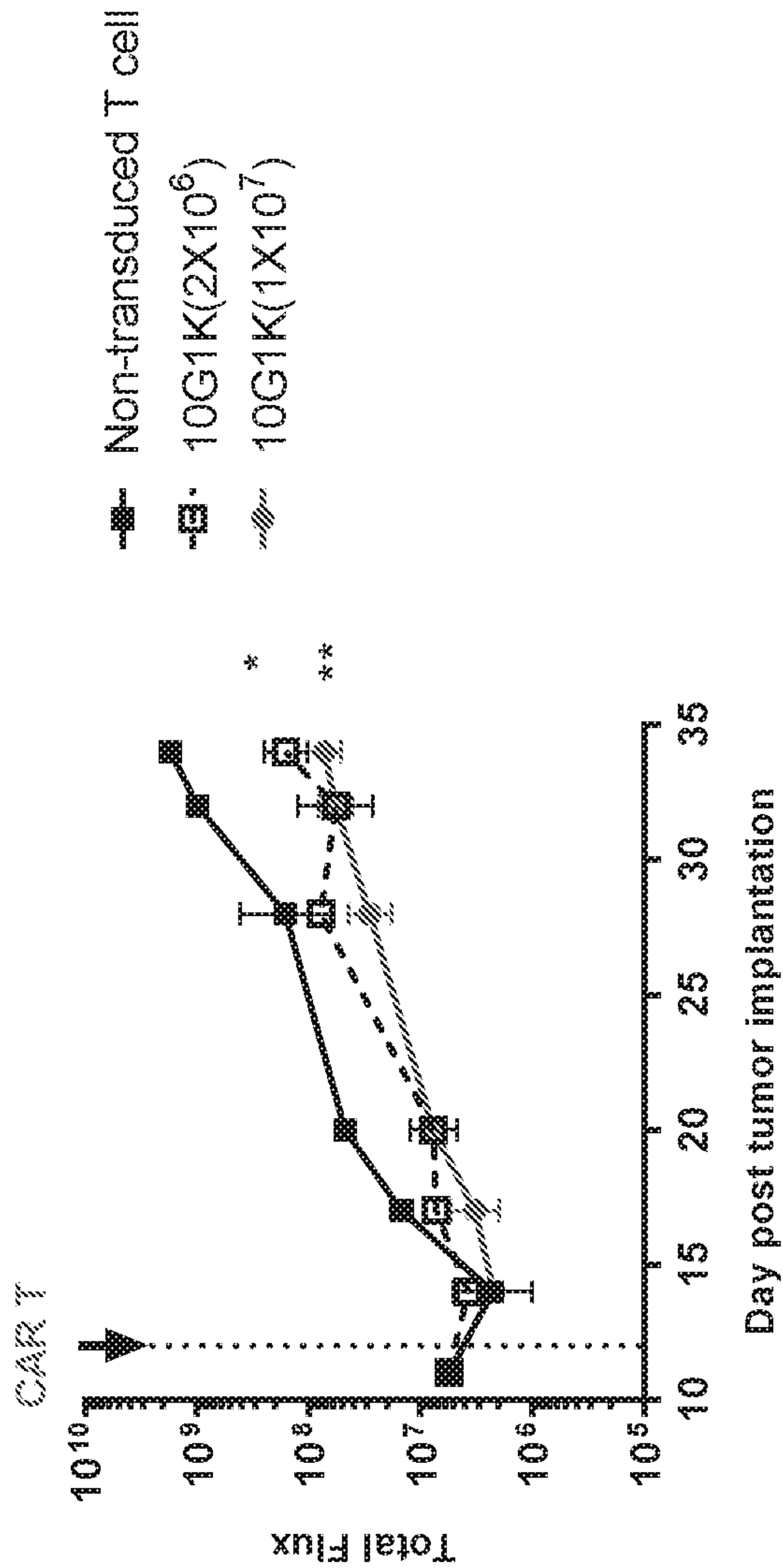


FIG. 9A

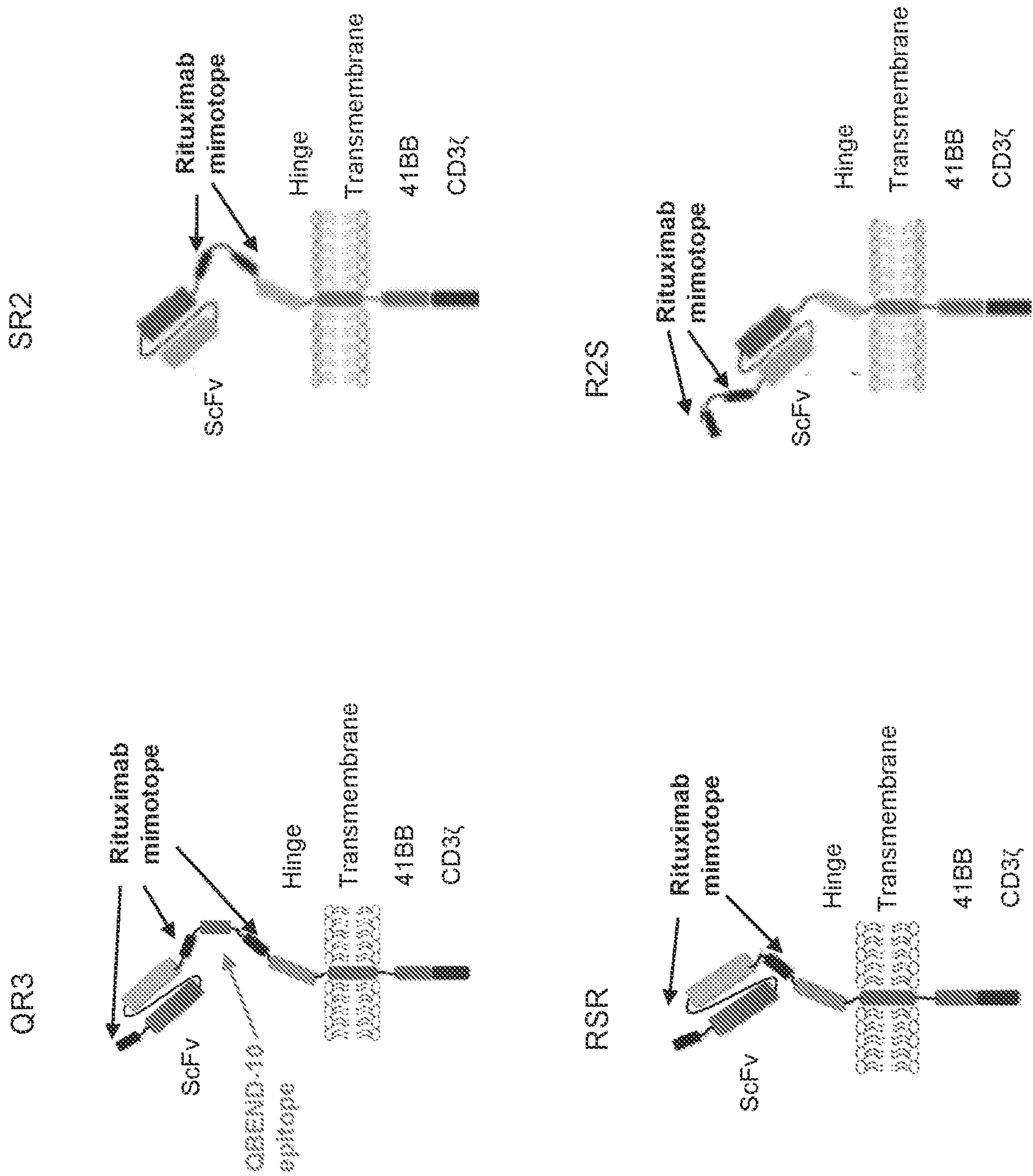


FIG. 9B

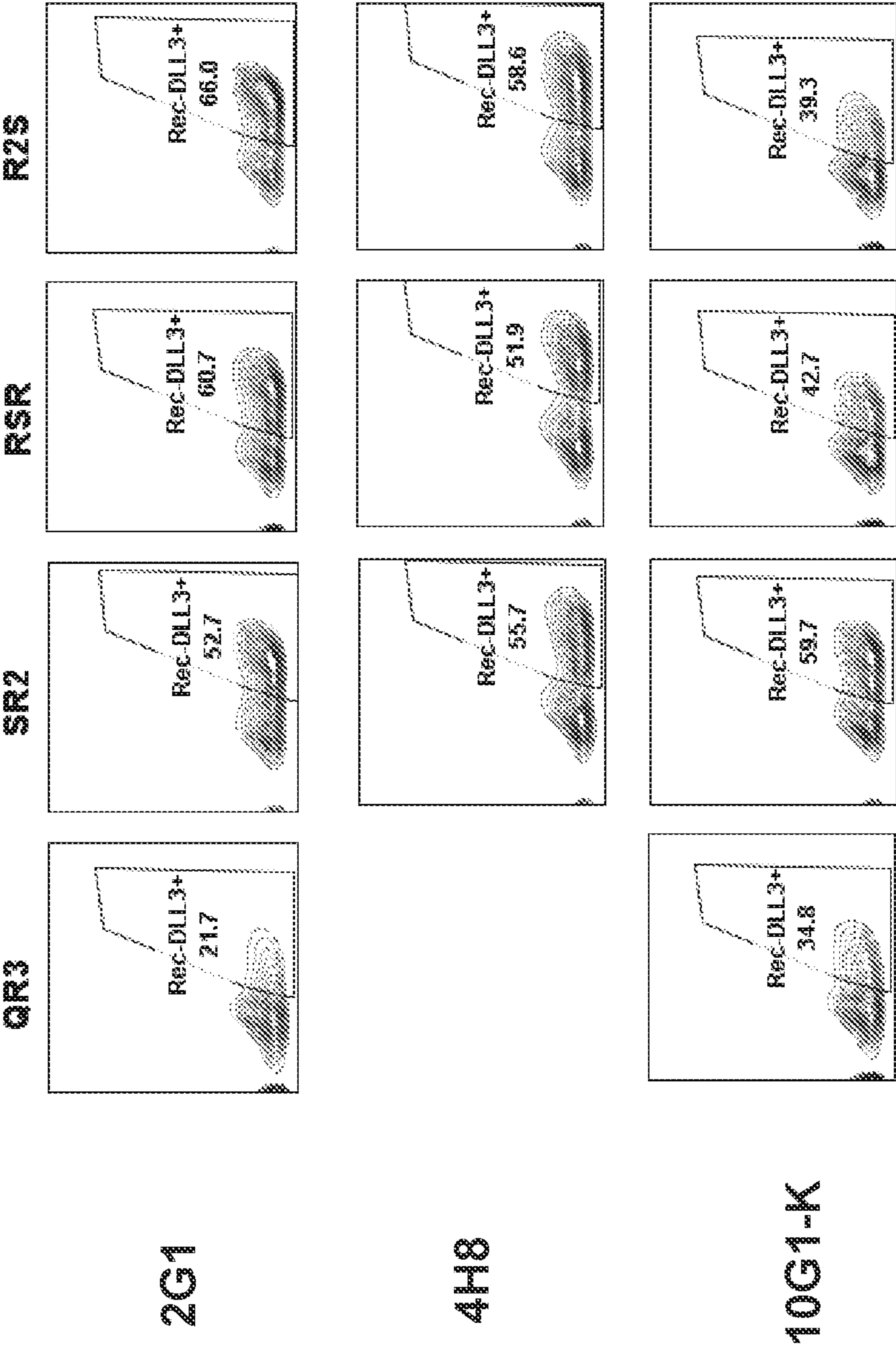


FIG. 9C

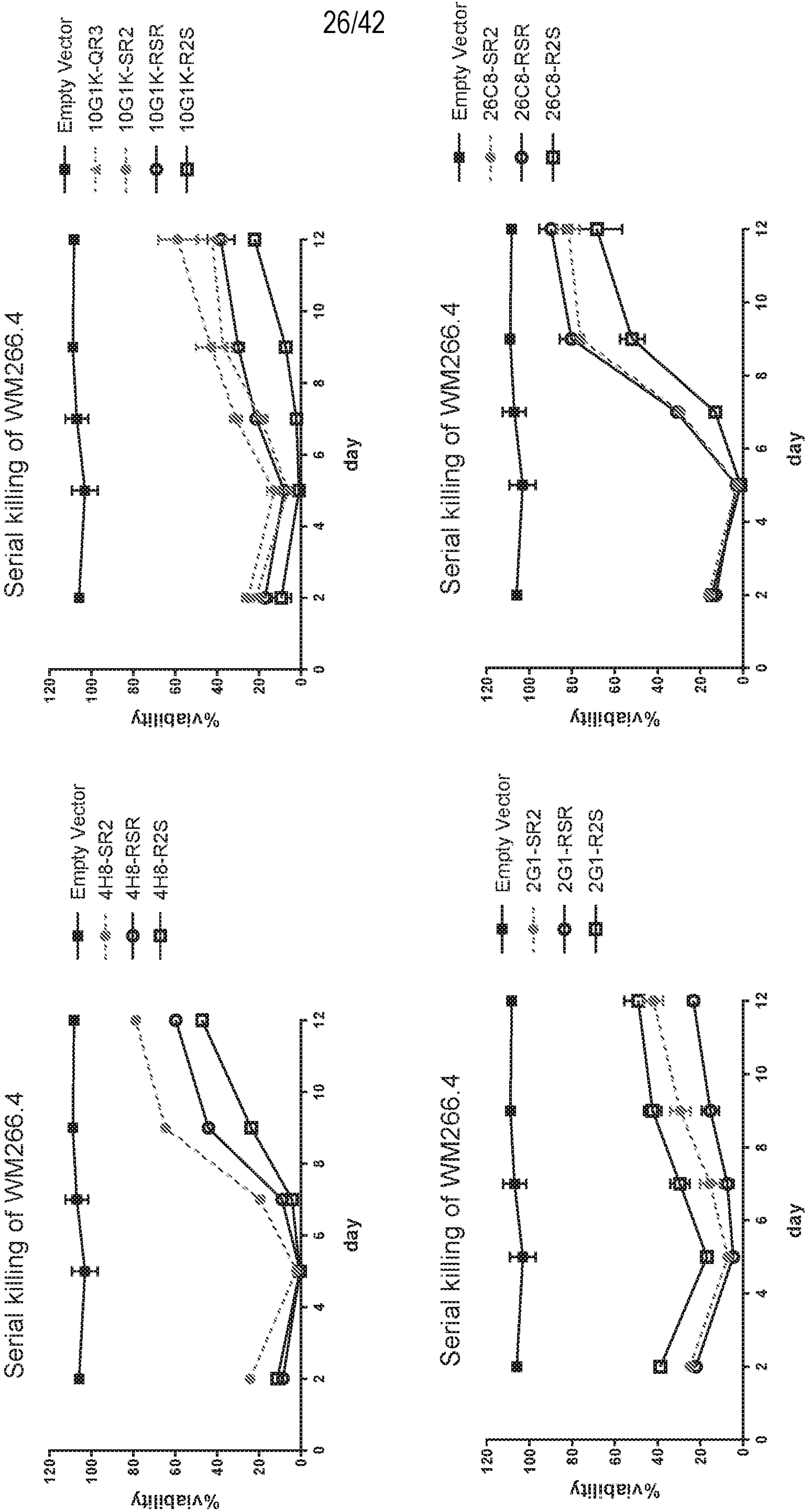


FIG. 10A

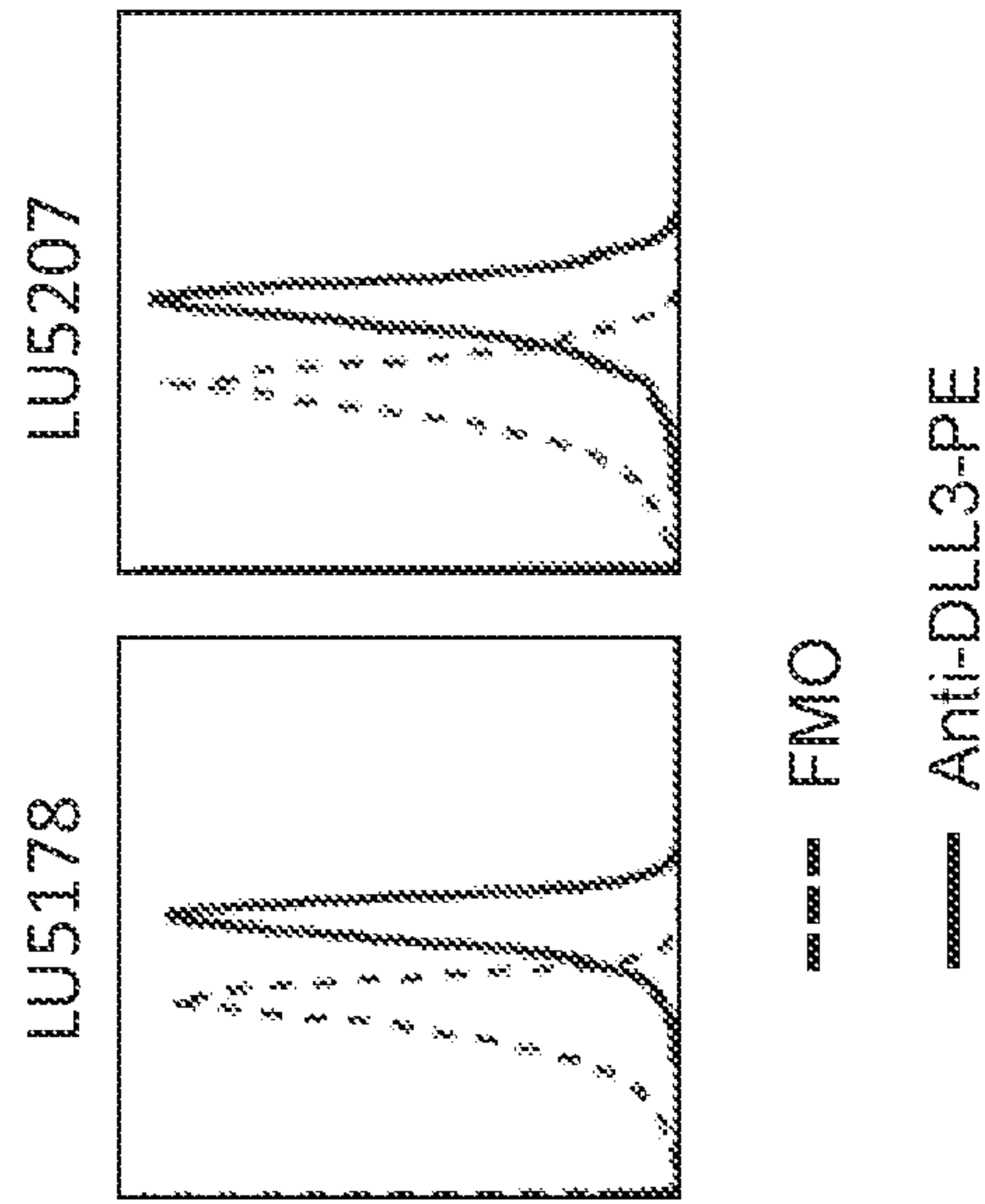


FIG. 10B

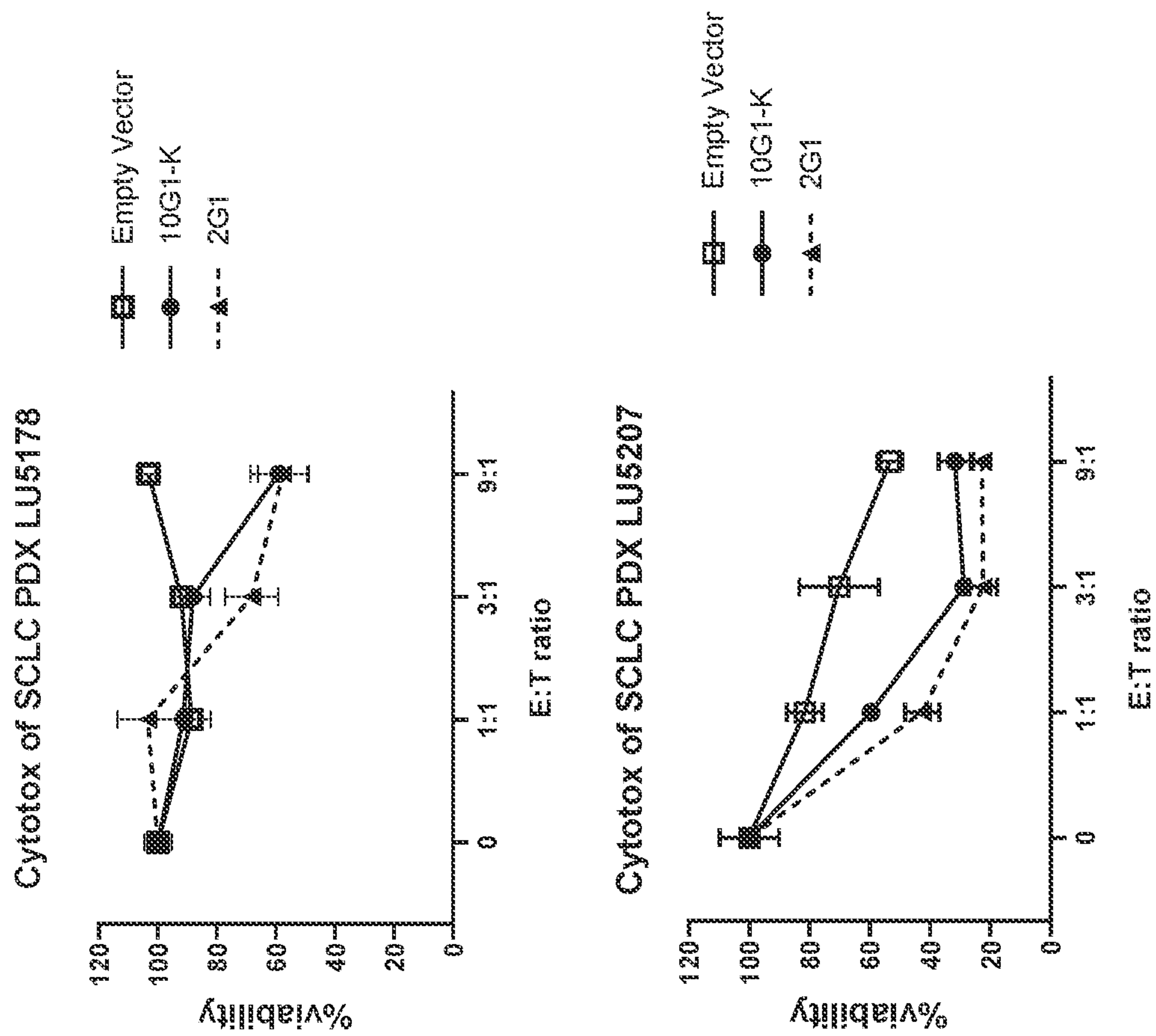
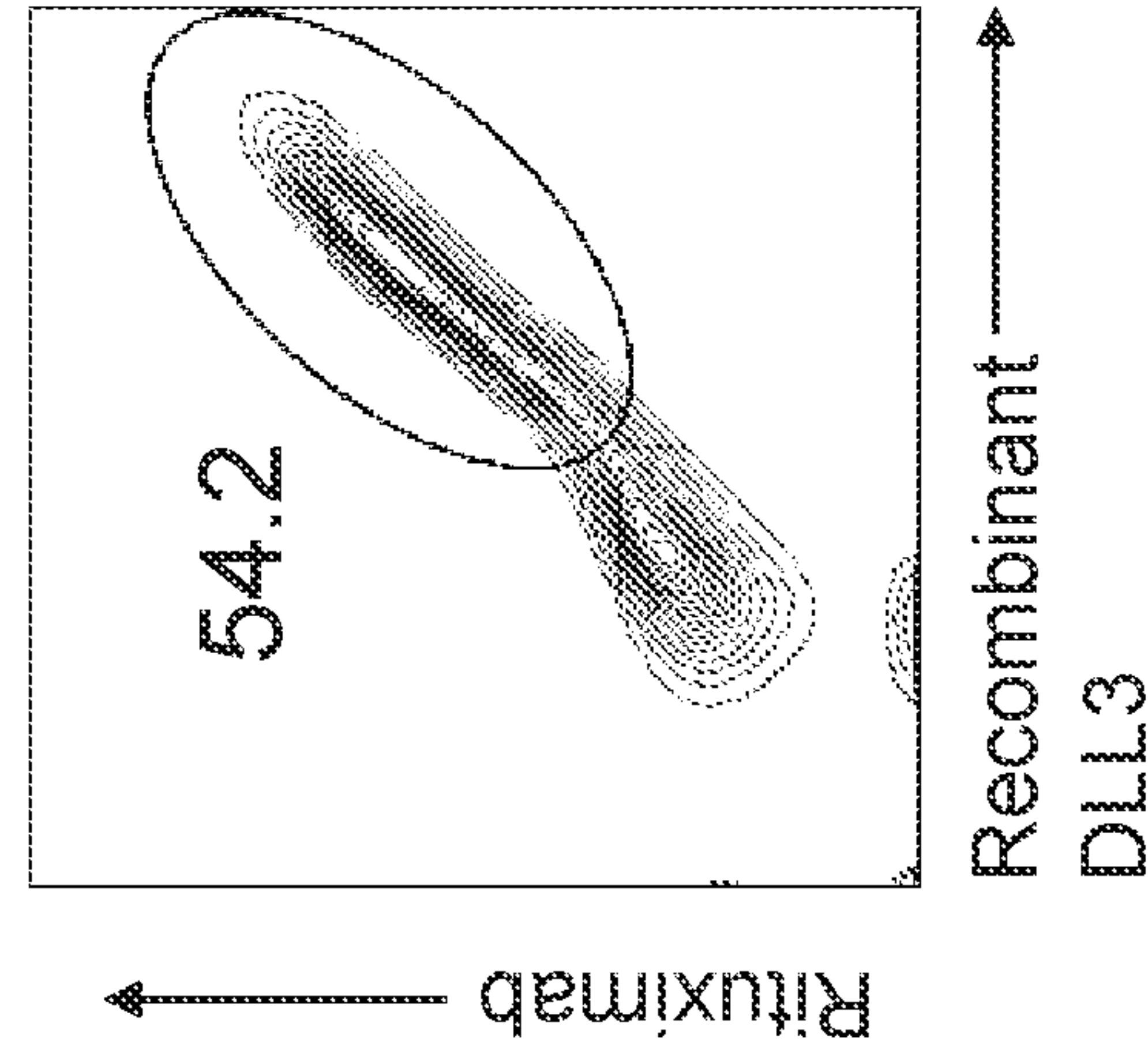


FIG. 11A

8E11-SR2



26C8-R2S

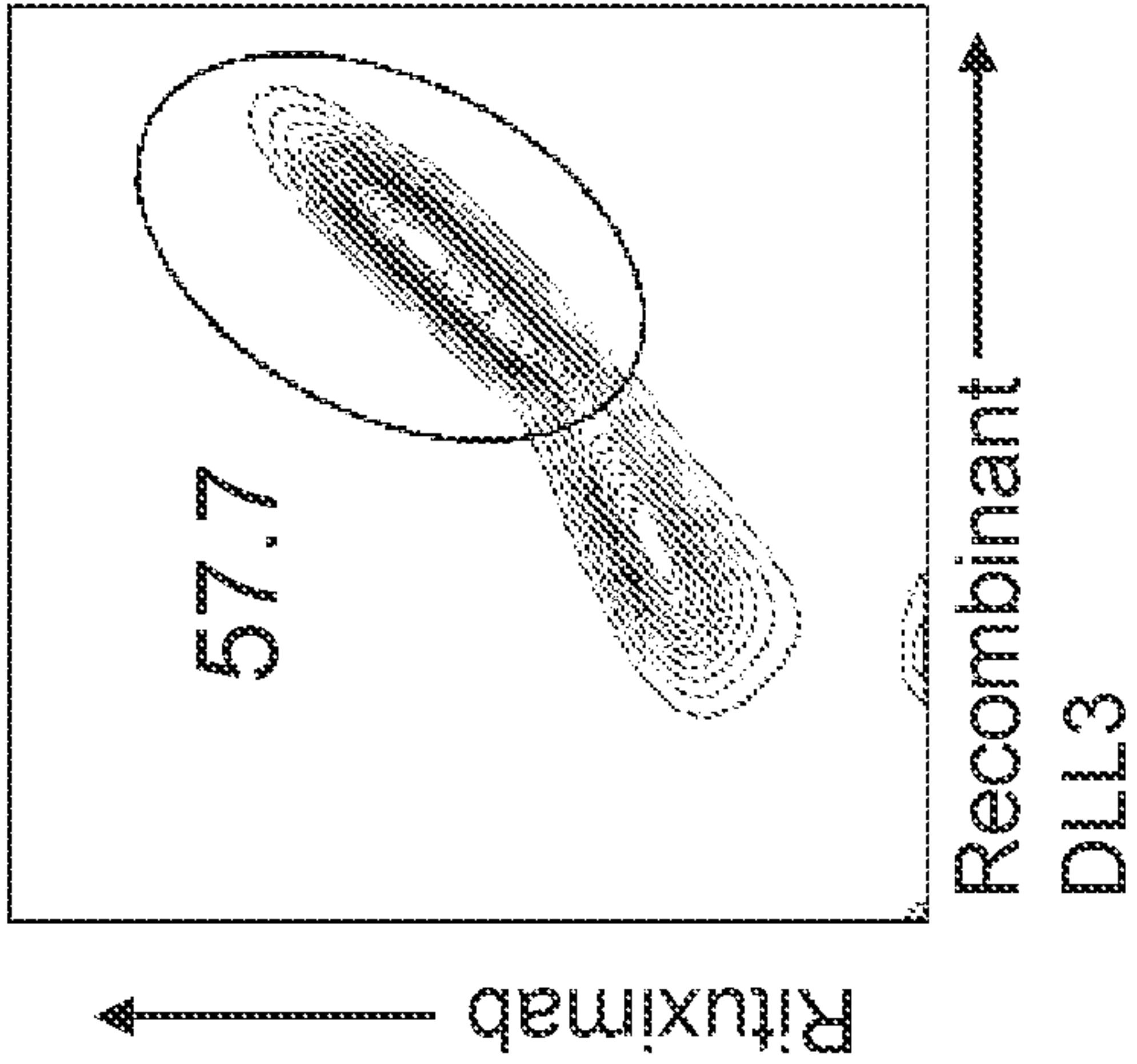
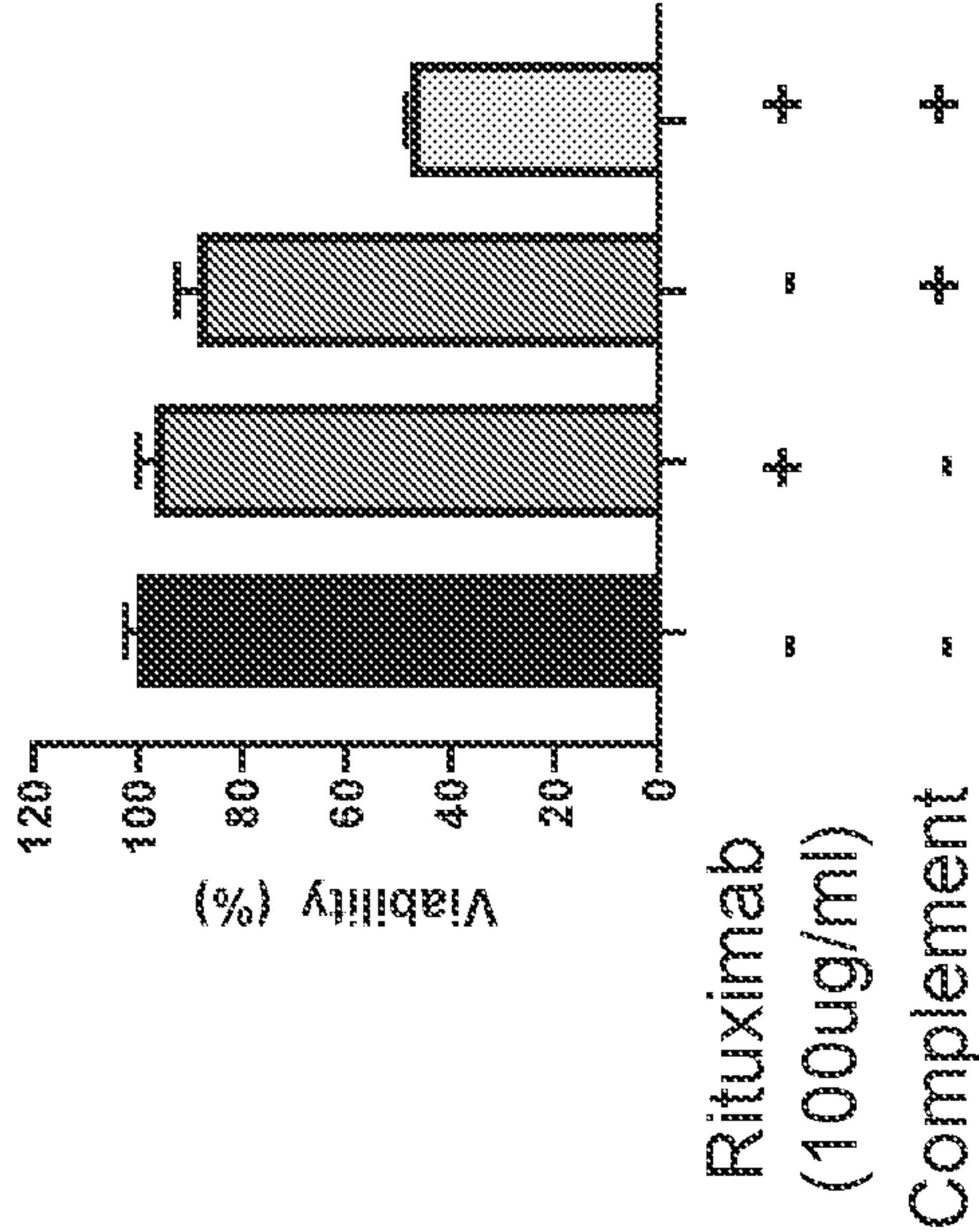


FIG. 11B

8E11-SR2 *in vitro* CDC assay



26C8-R2S *in vitro* CDC assay

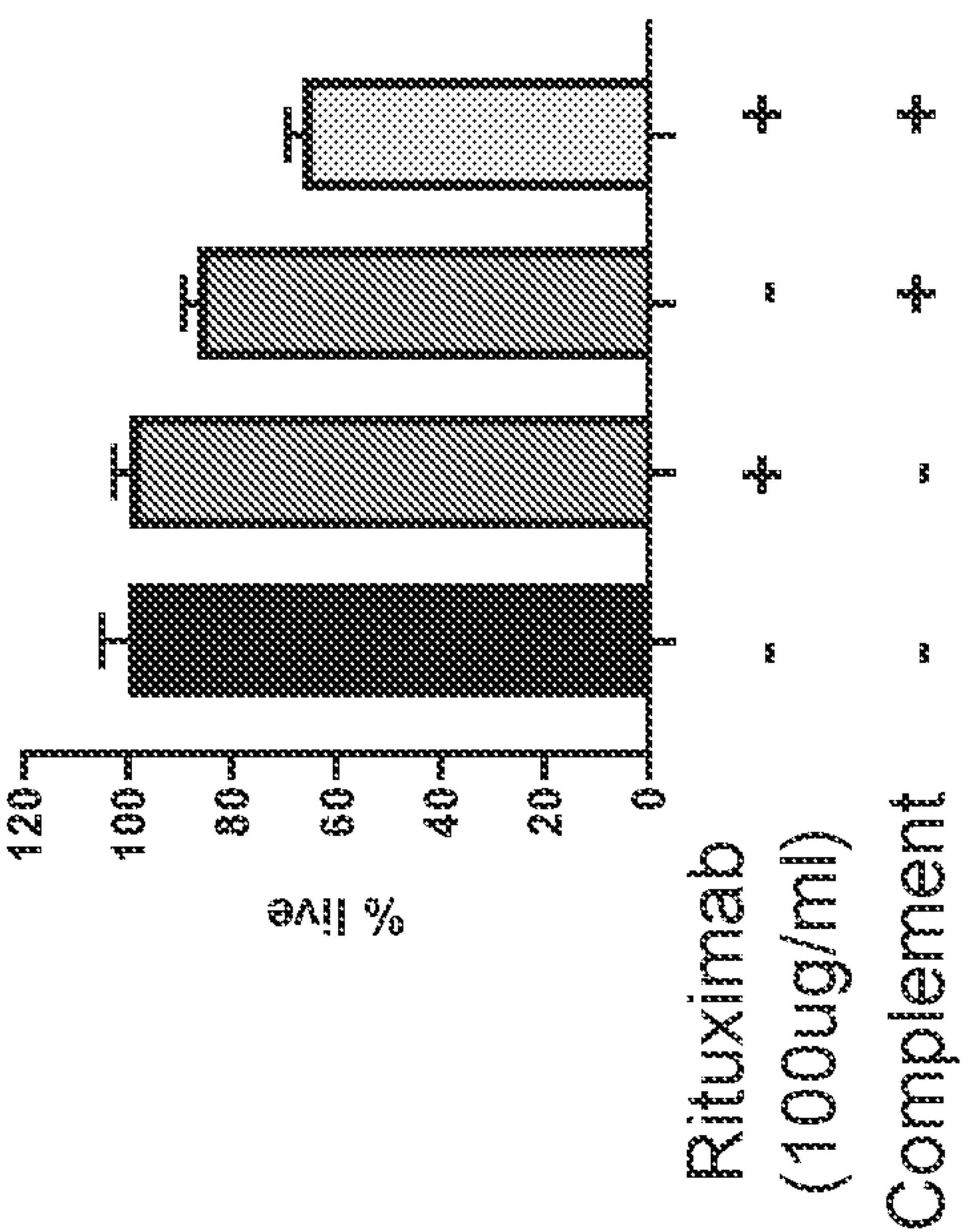


FIG. 12A

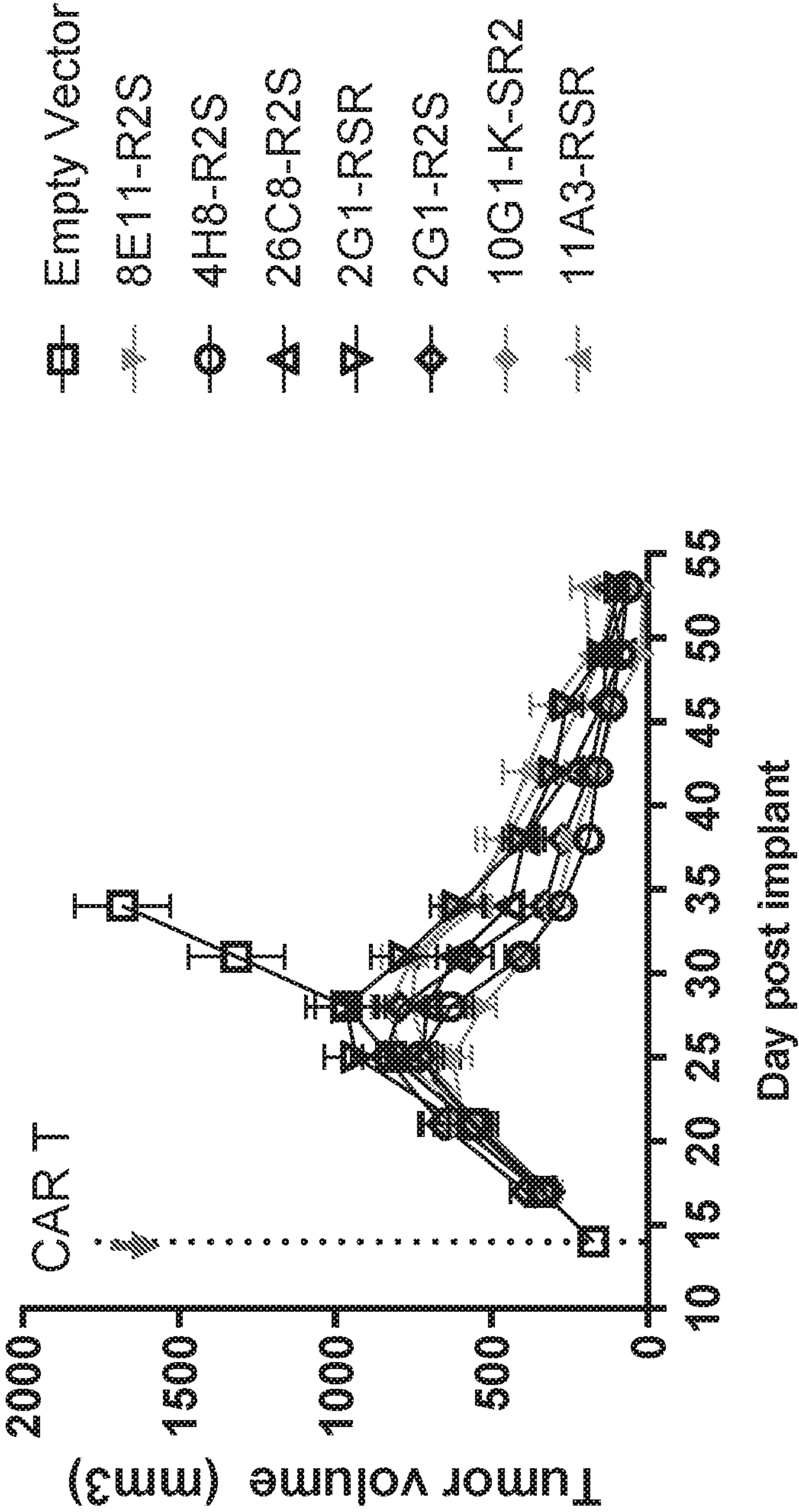


FIG. 12B

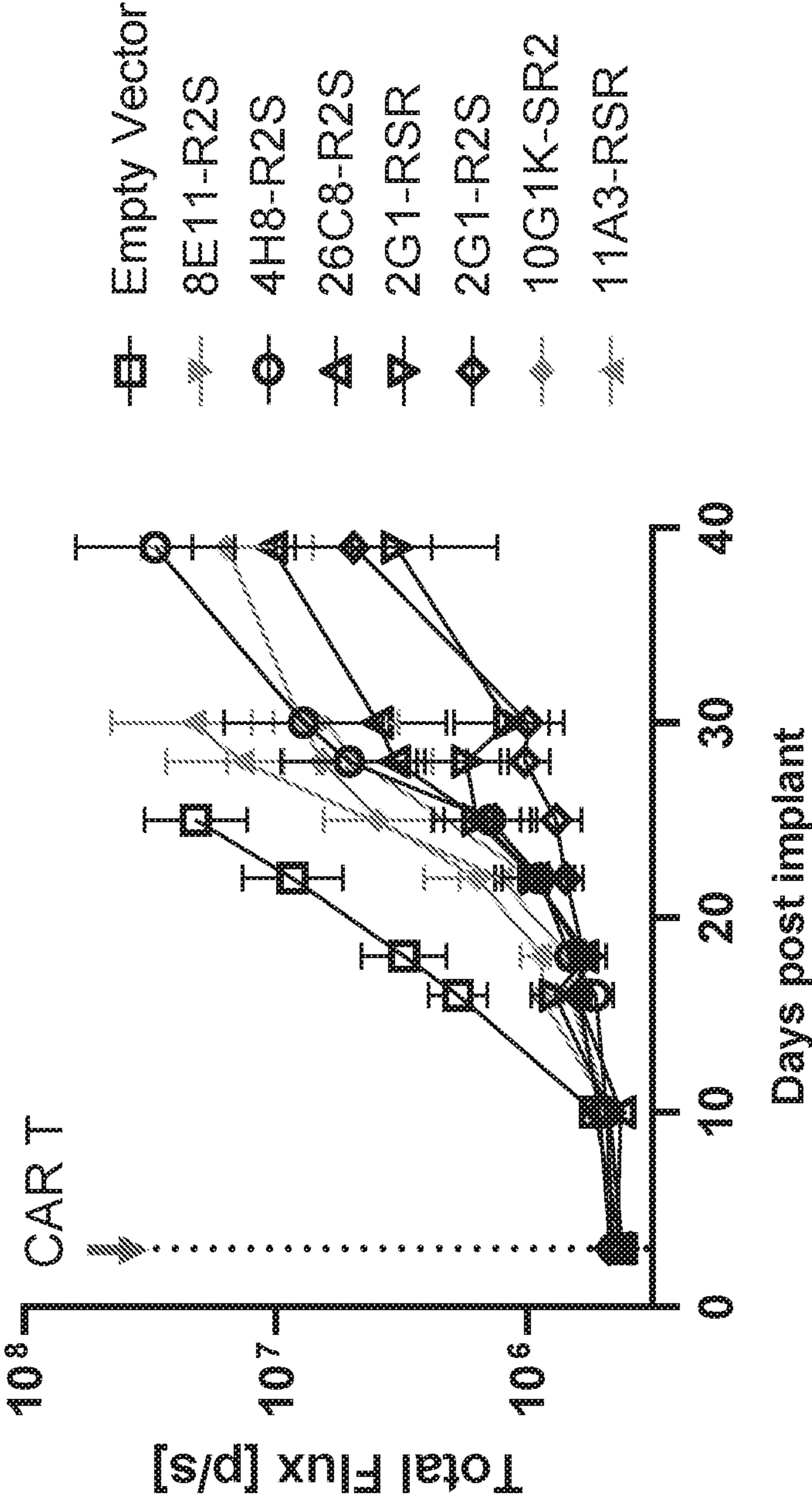


FIG. 13A

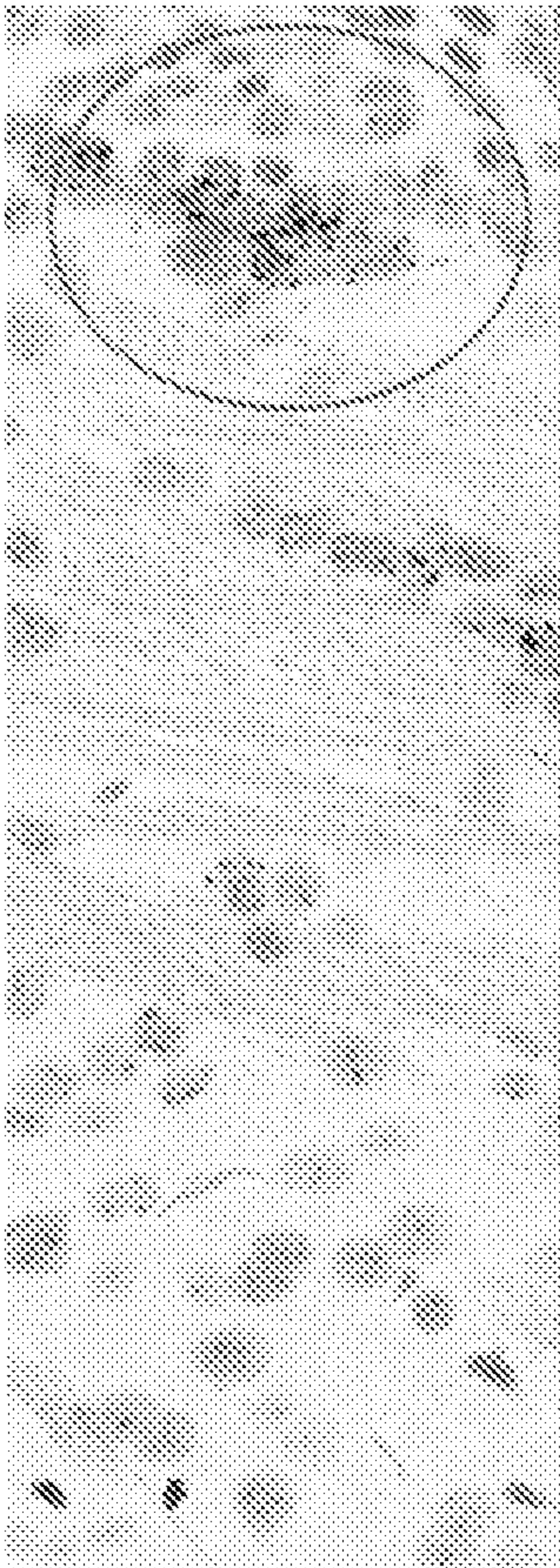
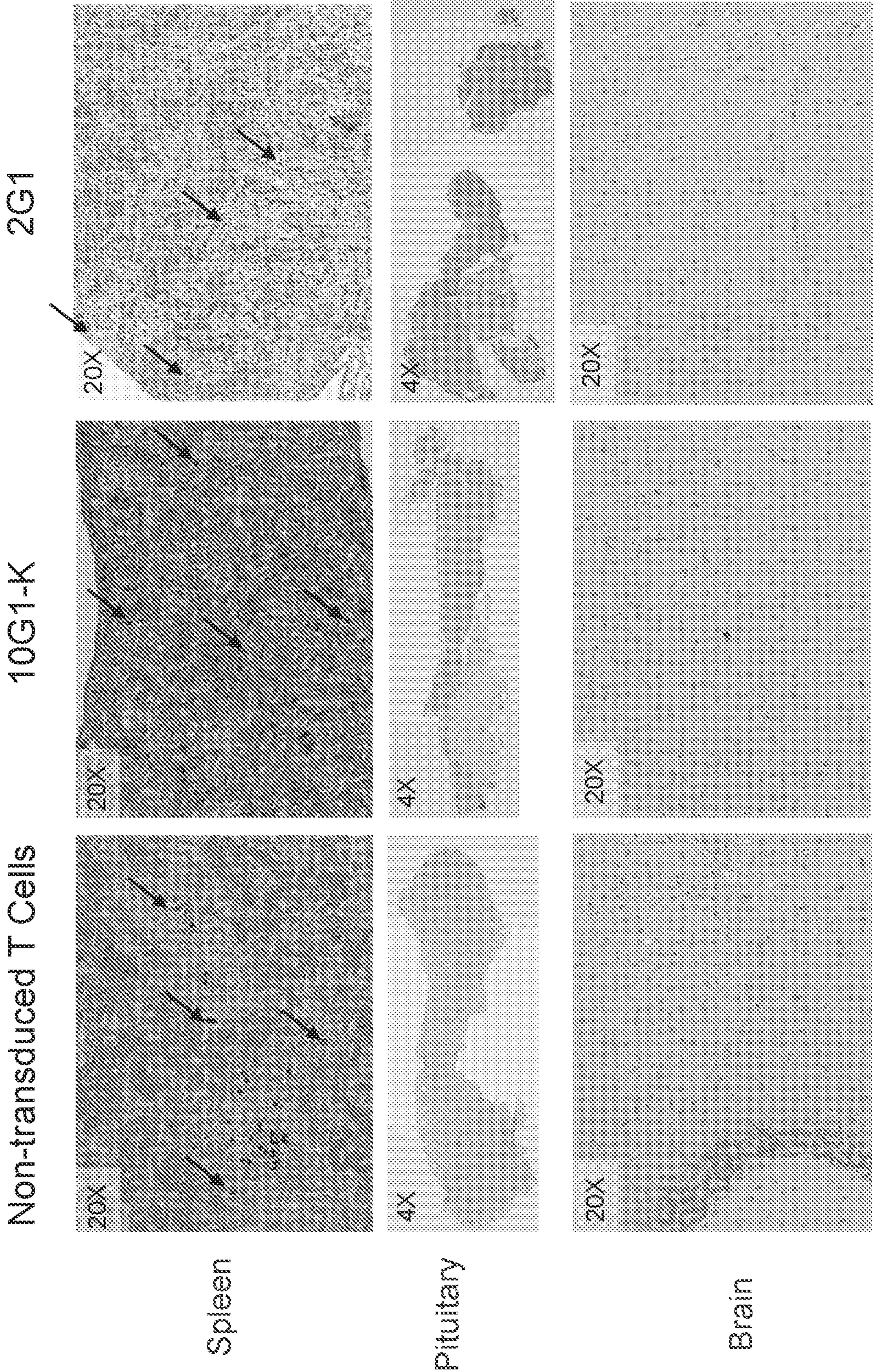


FIG. 13B



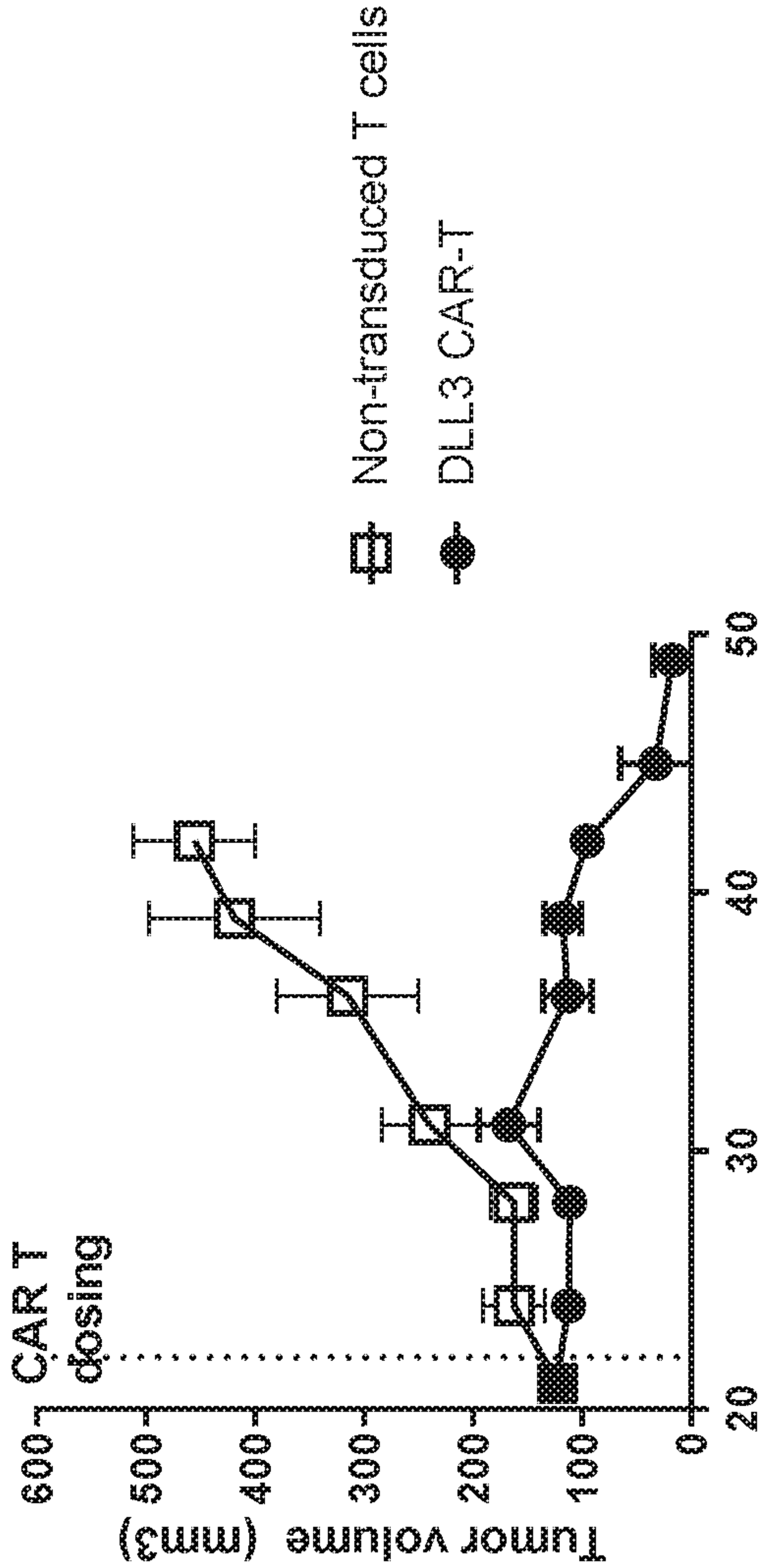
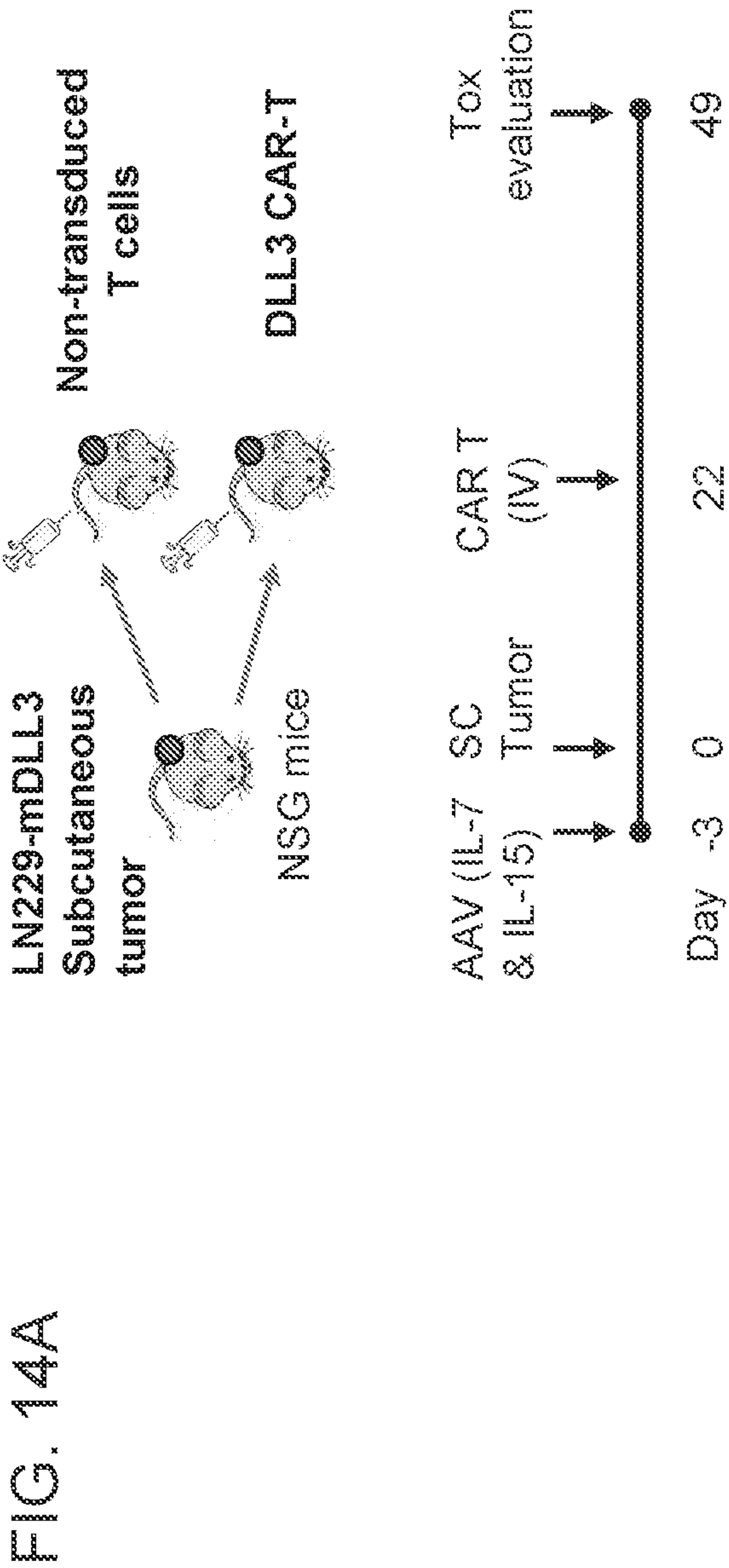


FIG. 14C

Human CD3 Staining Score (Day 49)

Group	Animal	Brain	Pituitary
Non-transduced T cells	#1	1	1
	#2	1	1
	#3	1	1
DLL3 CAR T	#4	2	3
	#5	1	3
	#6	1	3

Staining score:
0 = No staining
1 = Sparse-to-moderately low staining
2 = Moderate-to-moderately high staining
3 = Abundant staining

FIG. 14D

Histopathology Analysis (Day 49)

Group	Animal	Brain	Pituitary
Non-transduced T cells	#1	NSML	NSML
	#2	NSML	NSML
	#3	NSML	NSML
DLL3 CAR T	#4	NSML	Infiltrate, mixed cell (severity*=3)
	#5	NSML	Infiltrate, mononuclear cell(severity=2)
	#6	NSML	Infiltrate, mononuclear cell(severity=2)

NSML=No Significant Microscopic Lesions
*Severity: 1=Minimal; 2=Mild; 3=Moderate

FIG. 14E

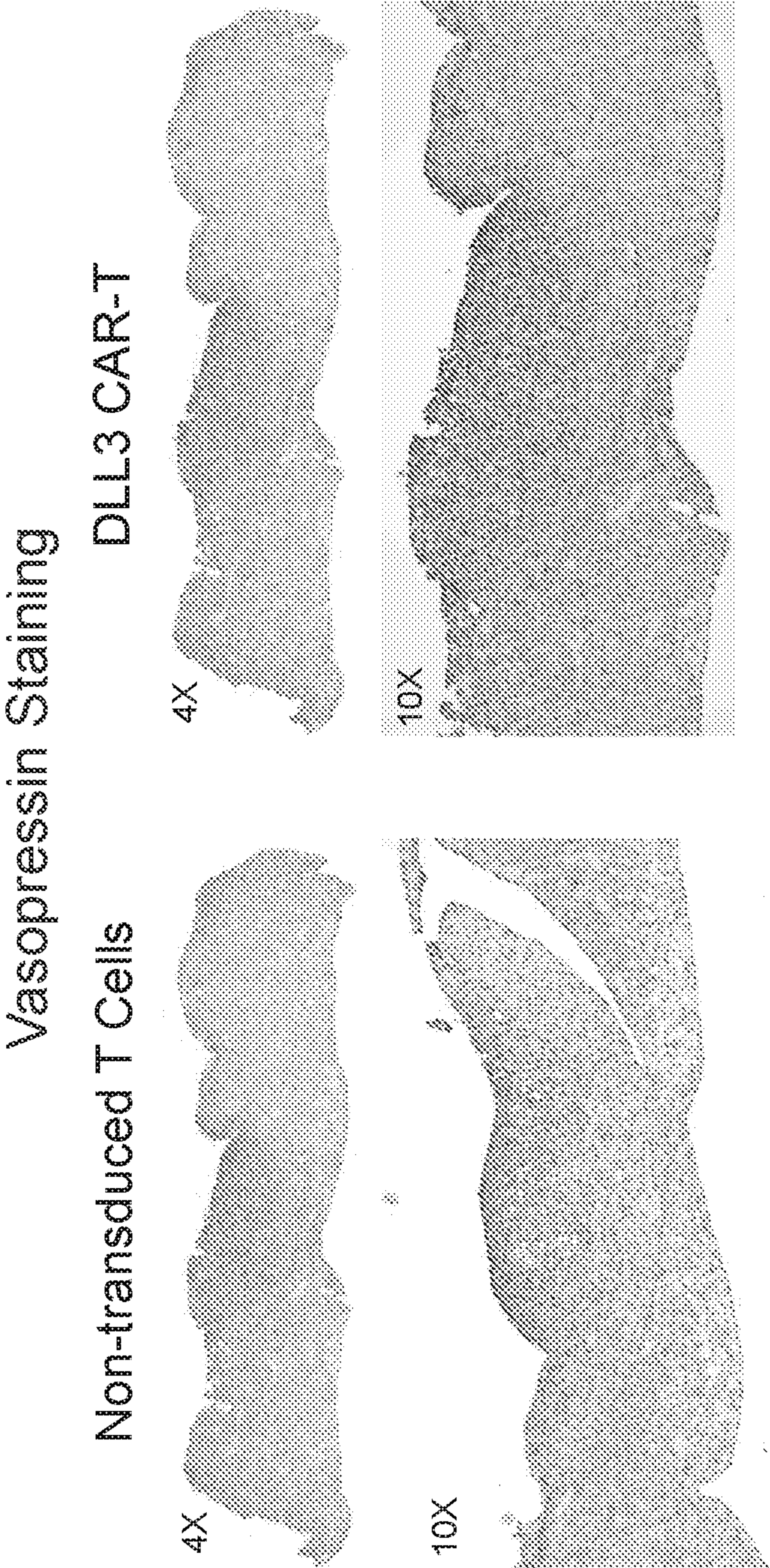


FIG. 14F

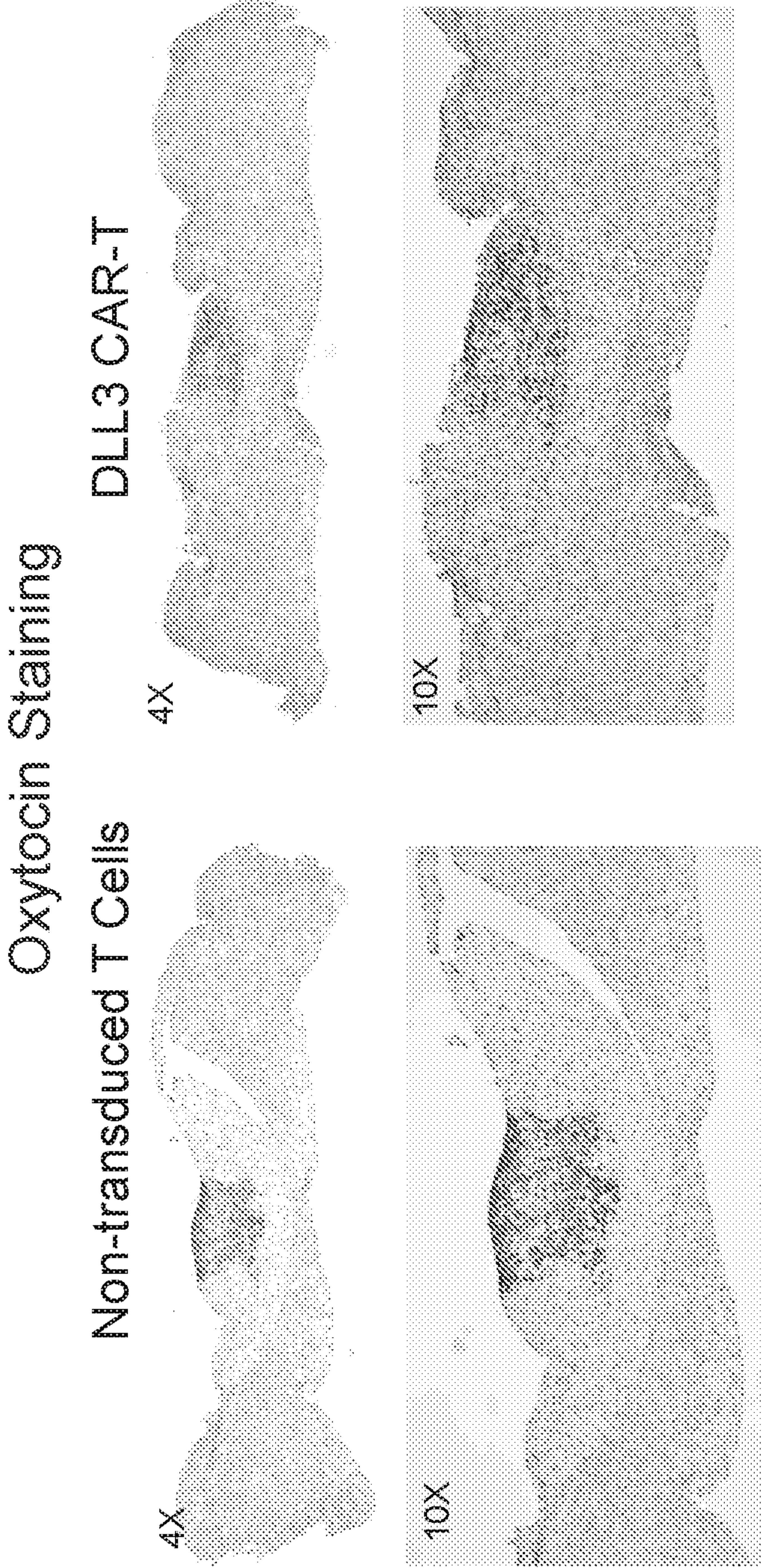


FIG. 15A

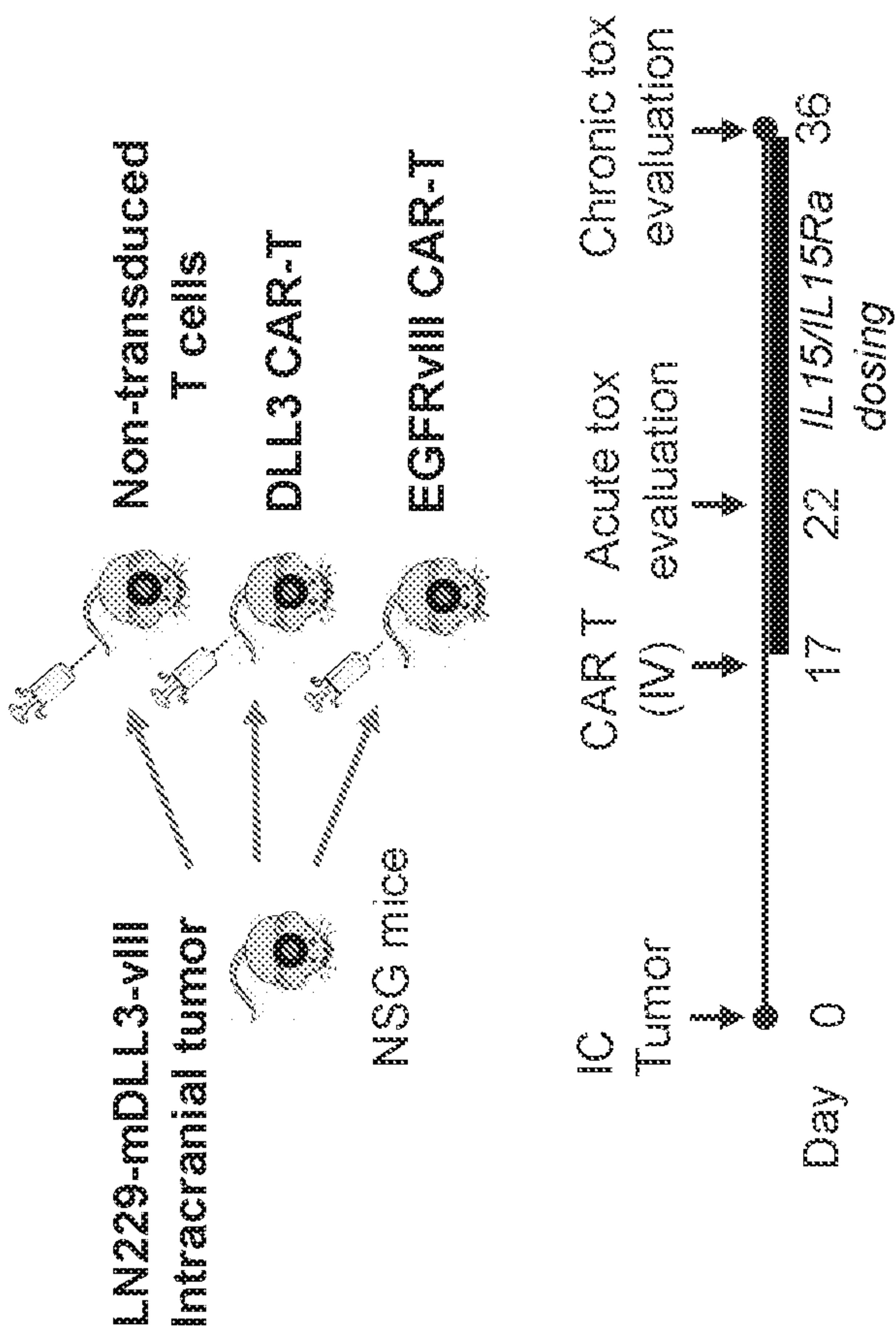


FIG. 15B

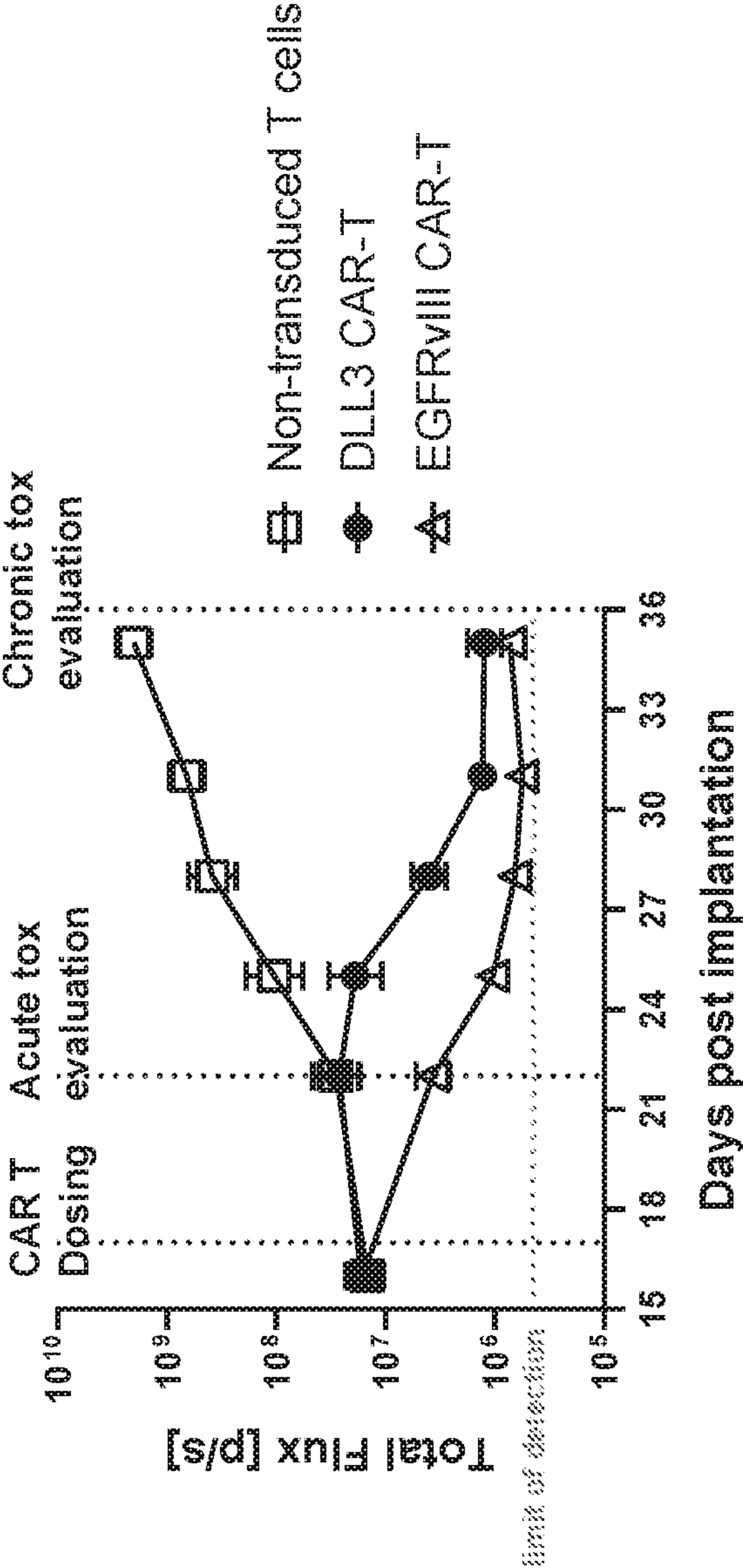


FIG. 15C

Human CD45 Staining Score (Day 36 or 38)

Group	Animal	Brain	Pituitary	Spleen
Non-transduced T cells	#1	1	1	3
	#2	1	1	3
	#3	1	1	3
	#4	1	1	3
	#5	1	1	3
	#6	1	2	3
	#7	1/2	1/2	3
DLL3 CAR T	#8	1	1/2	3
	#9	1	1/2	3
	#10	1	1/2	2
	#11	1	1	2
EGFRvIII CAR T	#12	1	1	3
	#13	1	1	2
	#14	1	1	3
	#15	1	1	3

hCD45 Staining score:
0 = No staining
1 = Rare/Sparse staining
2 = Sparse-to-moderately low staining
3 = Moderate-to-moderately high staining
4 = Abundant staining

FIG. 15D

Histopathology Analysis (Day 36 or 38)

Group	Animal	Brain	Pituitary
Non-transduced T cells	#1	NSML	NSML
	#2	Tumor present	NSML
	#3	Tumor present	NSML
	#4	Tumor present	NSML
	#5	Tumor present	NSML
DLL3 CAR T	#6	Tumor present	Infiltrate, mononuclear cell (severity=2)
	#7	Tumor present	Infiltrate, mononuclear cell (severity=2)
	#8	Tumor present	Infiltrate, mononuclear cell (severity=1)
	#9	NSML	Infiltrate, mononuclear cell (severity=2)
	#10	NSML	Infiltrate, mononuclear cell (severity=2)
EGFRvIII CAR T	#11	NSML	NSML
	#12	NSML	NSML
	#13	NSML	NSML
	#14	NSML	NSML
	#15	NSML	NSML

NSML=No Significant Microscopic Lesions
**Severity: 1=Minimal; 2=Mild; 3=Moderate

FIG. 16A

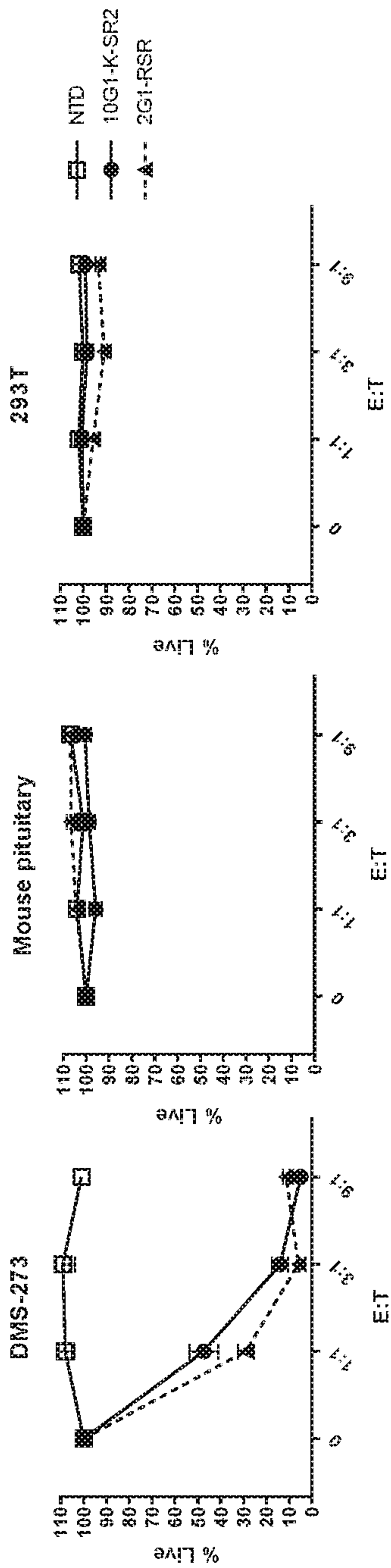


FIG. 16B

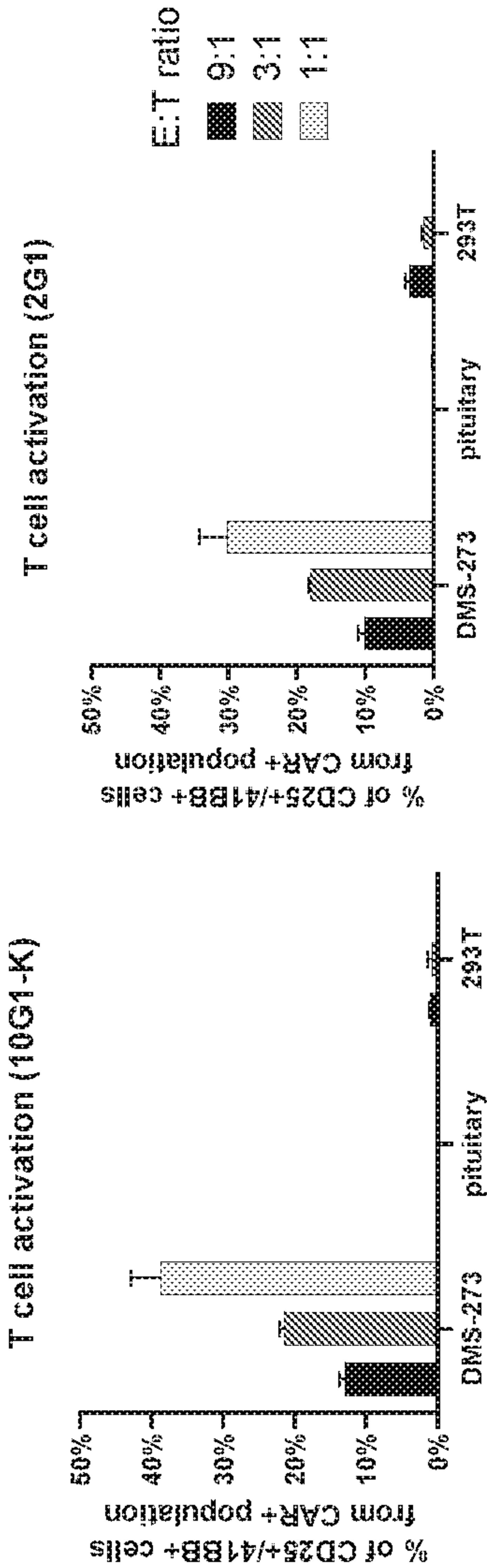


FIG. 16C

