FIGURE 1 (A-B)

FIG.1A

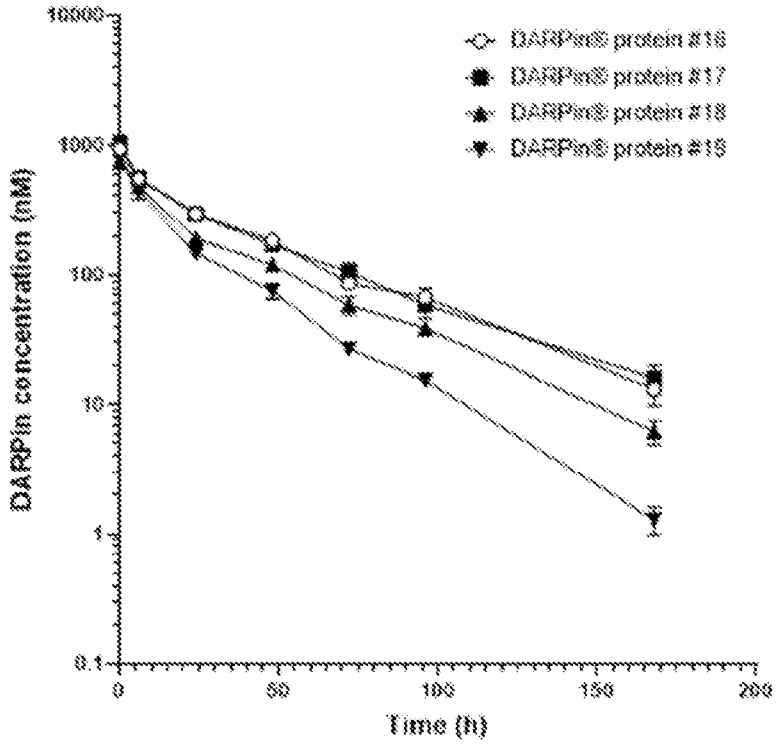
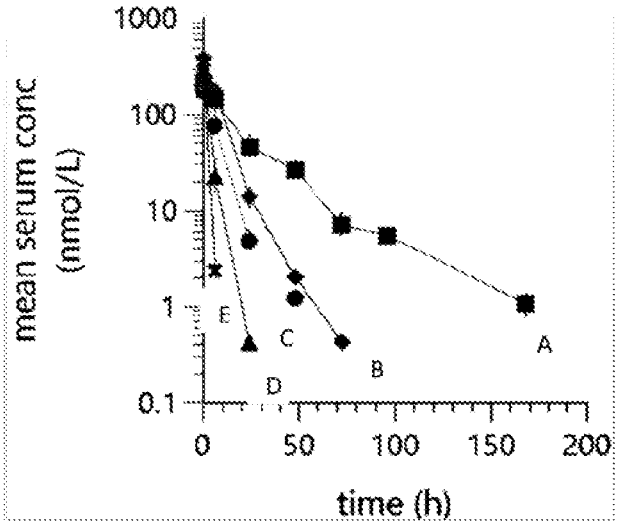


FIG. 1B



A. Mean vs actual time, DARPin® protein #51

B. Mean vs actual time, DARPin® protein #50

C. Mean vs actual time, DARPin® protein #54

D. Mean vs actual time, DARPin® protein #53

E. Mean vs actual time, DARPin® protein #55

FIGURE 2 (A-D)

FIG. 2A

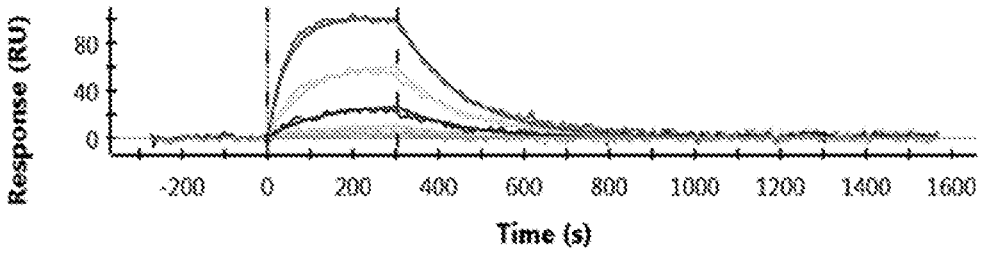


FIG. 2B

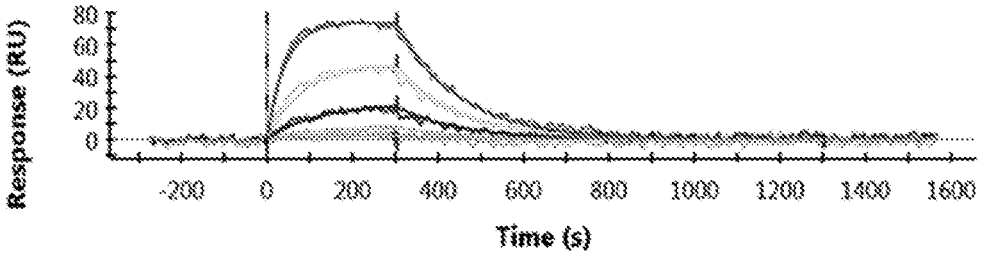


FIG. 2C

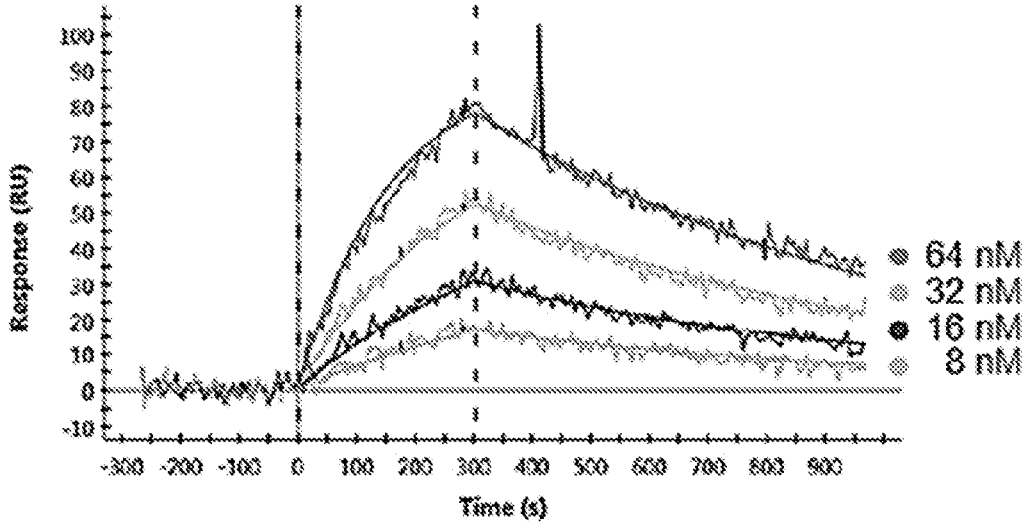

Response (RU)
100
90
80
70
60
50
40
30
20
10
0
-10
-300
-200
-100
0
100
200
300
400
500
600
700
800
900
Time (s)
64 nM
32 nM
16 nM
8 nM

FIG. 2D

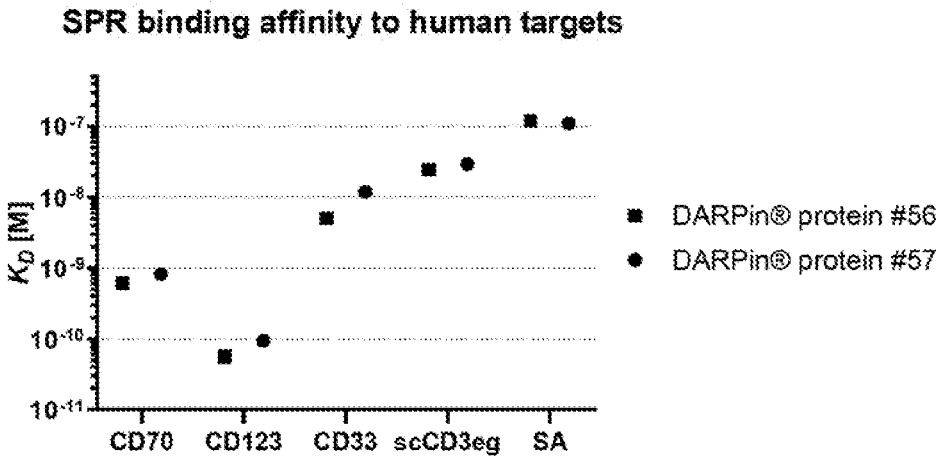
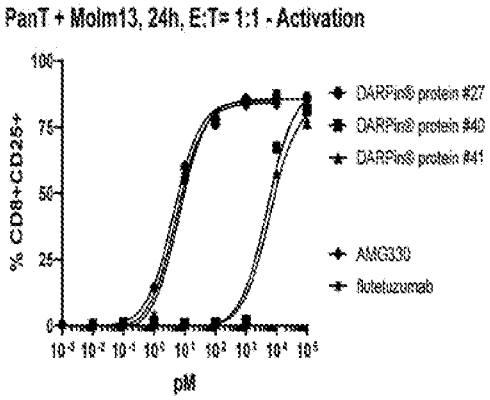

SPR binding affinity to human targets
K_D [M]
10^{-7}
10^{-8}
10^{-9}
10^{-10}
10^{-11}
CD70
CD123
CD33
scCD3eg
SA
DARPin® protein #56
DARPin® protein #57

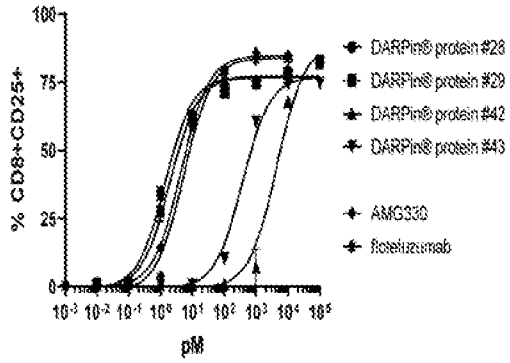
FIGURE 3 (A-C)

FIG. 3A



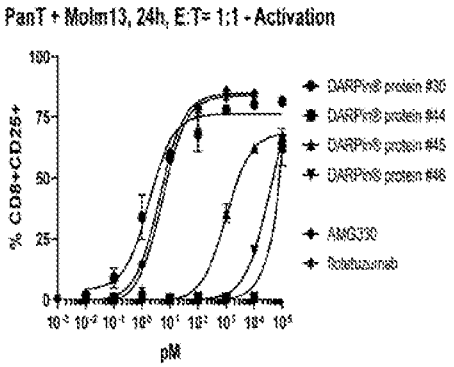
	EC50
TLO995	6.518
TLO1026	5023
TLO1027	6605
TLO1028	~ 816349397
AMG330 (batch 1)	4.352
DART	5.348

FIG. 3B



	EC50
TLO1015 (parental)	1.413
TLO1029	1.972
TLO1030	4467
TLO1031	373.4
TLO1032	69277
AMG330 (batch 1)	4.352
DART	5.348

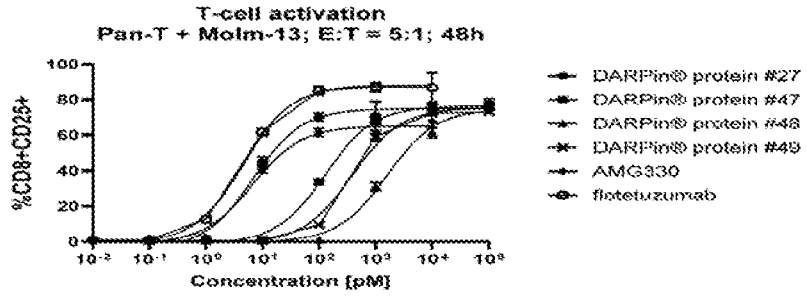
FIG. 3C



	EC50
TLO954 (parental)	1.802
TLO1034	~ 60535629
TLO1035	1885
TLO1036	36196
TLO1037	-
AMG330 (batch 1)	4.352
DART	5.348

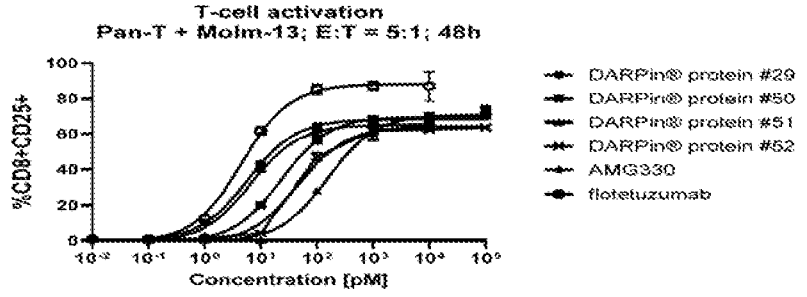
FIGURE 4 (A-C)

FIG. 4A



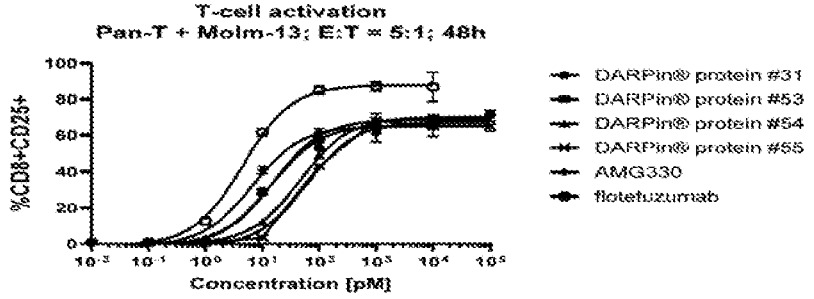
	EC50
TLO995	6.8
TLO1038	127
TLO1041	1567
TLO1044	378
AMG330	6.6
DART	4.6

FIG. 4B



	EC50
TLO1029	5.6
TLO1039	23
TLO1042	155
TLO1045	46
AMG330	6.6
DART	4.6

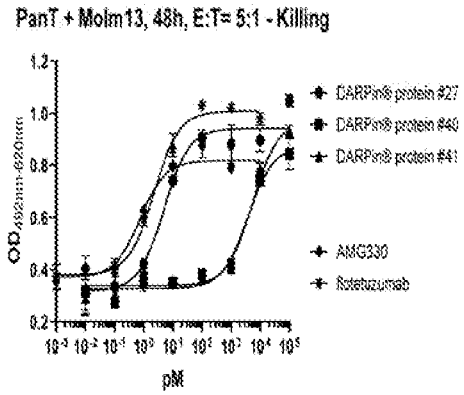
FIG. 4C



	EC50
TLO1033	14
TLO1040	15
TIO1043	45
TLO1046	59
AMG330	6.6
DART	4.6

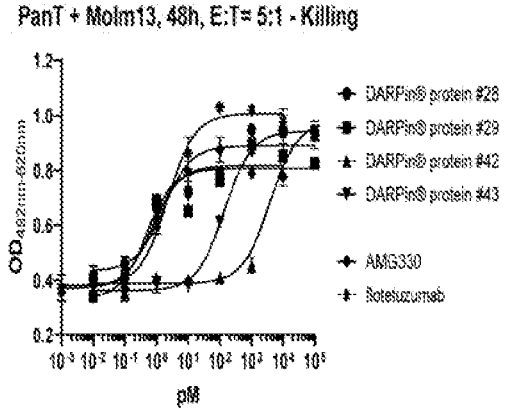
FIGURE 5 (A-C)

FIG. 5A



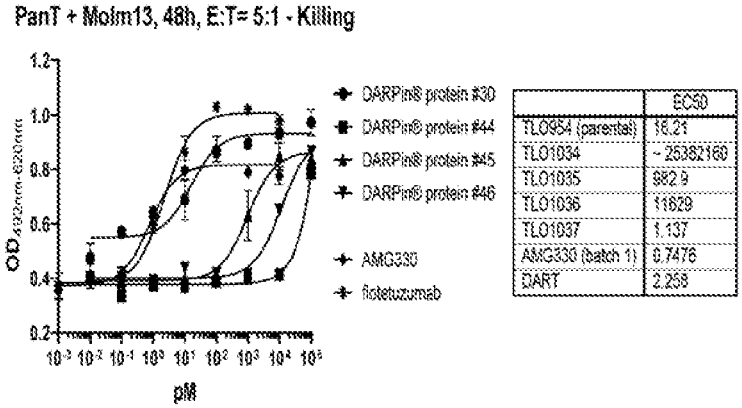
	EC50
TLO995	4.688
TLO1026	3709
TLO1027	5334
TLO1028	217668
AMG330 (batch 1)	0.7476
DART	2.258

FIG. 5B



	EC50
TLO1015 (parental)	1.678
TLO1029	0.4854
TLO1030	3819
TLO1031	139.0
TLO1032	0.3651
AMG330 (batch 1)	0.7476
DART	2.258

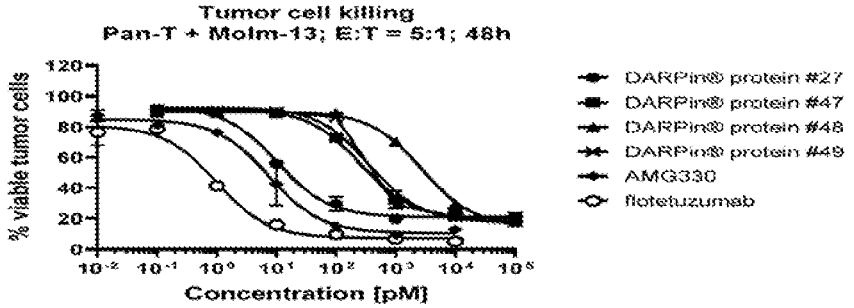
FIG. 5C



	EC50
TLO954 (parental)	16.21
TLO1034	~ 25382160
TLO1035	982.9
TLO1036	11629
TLO1037	1.137
AMG330 (batch 1)	0.7476
DART	2.258

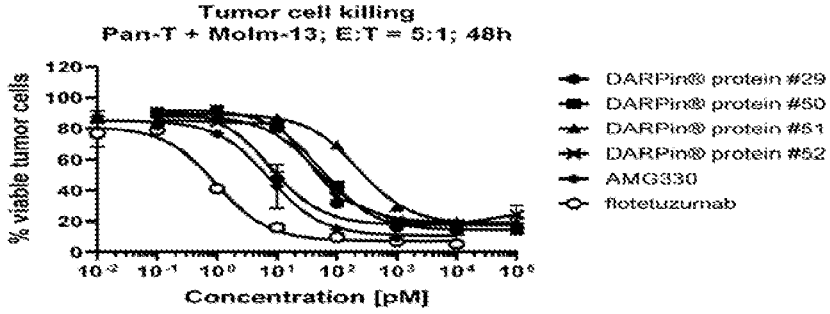
FIGURE 6 (A-C)

FIG. 6A



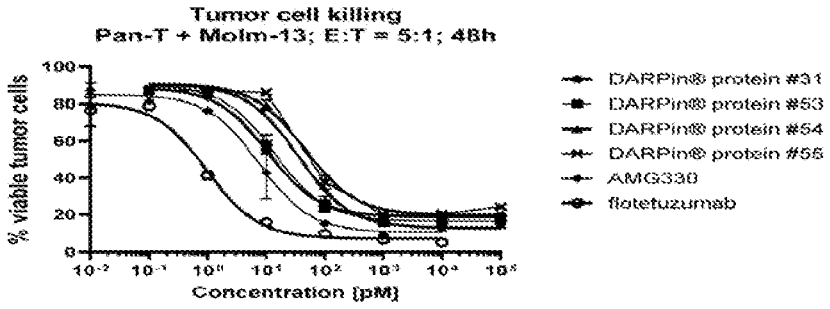
	EC50
TLO995	10
TLO1038	257
TLO1041	2725
TLO1044	382
AMG330	7.5
DART	0.96

FIG. 6B



	EC50
TLO1029	7.6
TLO1039	55
TLO1042	229
TLO1045	44
AMG330	7.5
DART	0.96

FIG. 6C



	EC50
TLO1033	11
TLO1040	14
TLO1043	35
TLO1046	46
AMG330	7.5
DART	0.96

FIGURE 7

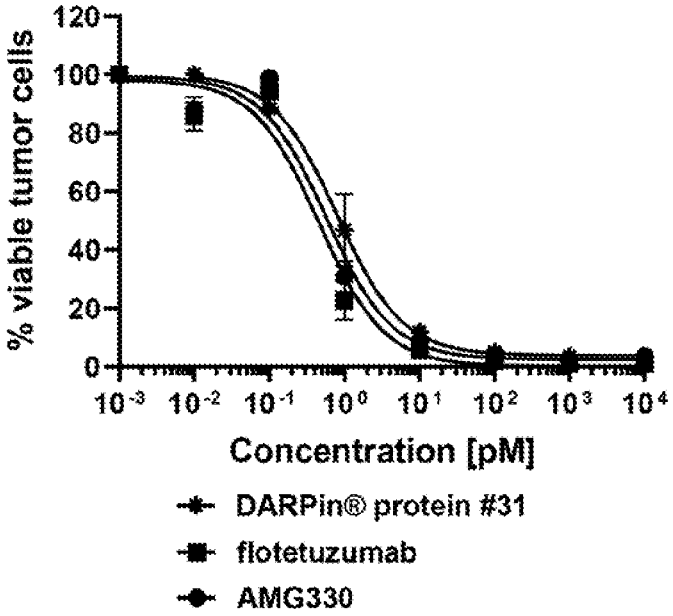
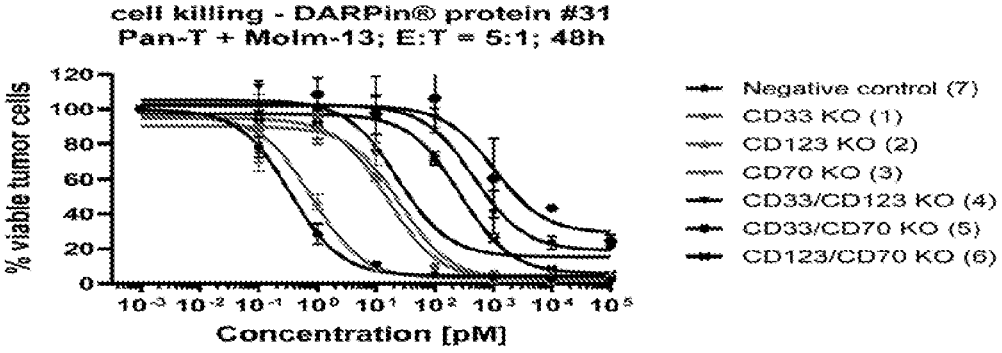


FIGURE 8



	EC50
N1	0.34
CD33KO	16
CD123KO	0.81
CD70KO	25
CD33/123DKO	466
CD33/70DKO	1036
CD123/70DKO	267
CD33CD123CD70TKO	23

3PL-Fit

FIGURE 9 (A-D)

FIG. 9A

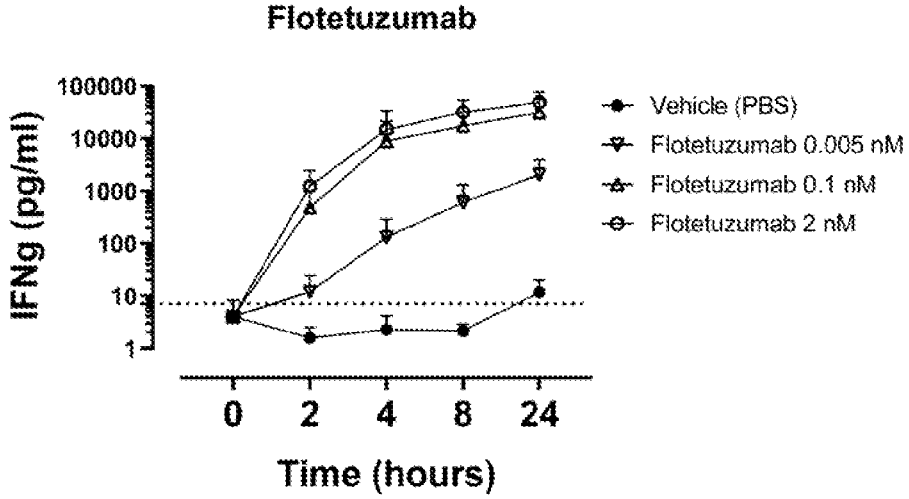


FIG. 9B

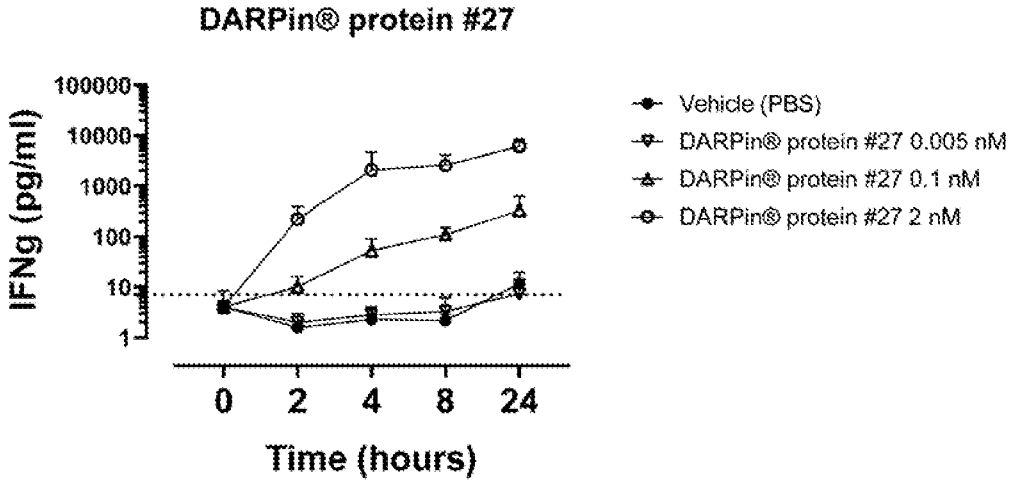


FIG. 9C

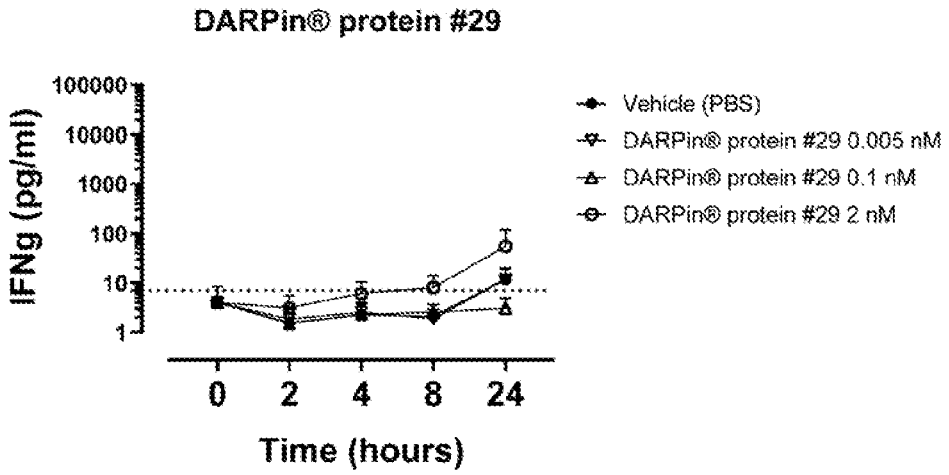

DARPin® protein #29
IFNg (pg/ml)
100000
10000
1000
100
10
1
0
2
4
8
24
Time (hours)
Vehicle (PBS)
DARPin® protein #29 0.005 nM
DARPin® protein #29 0.1 nM
DARPin® protein #29 2 nM

FIG. 9D

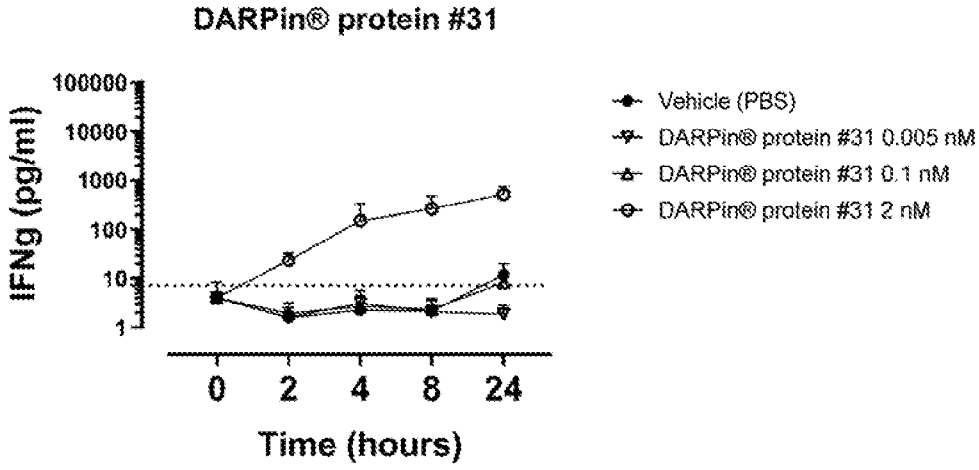

DARPin® protein #31
IFNg (pg/ml)
100000
10000
1000
100
10
1
0
2
4
8
24
Time (hours)
Vehicle (PBS)
DARPin® protein #31 0.005 nM
DARPin® protein #31 0.1 nM
DARPin® protein #31 2 nM

FIGURE 10 (A-D)

FIG. 10A

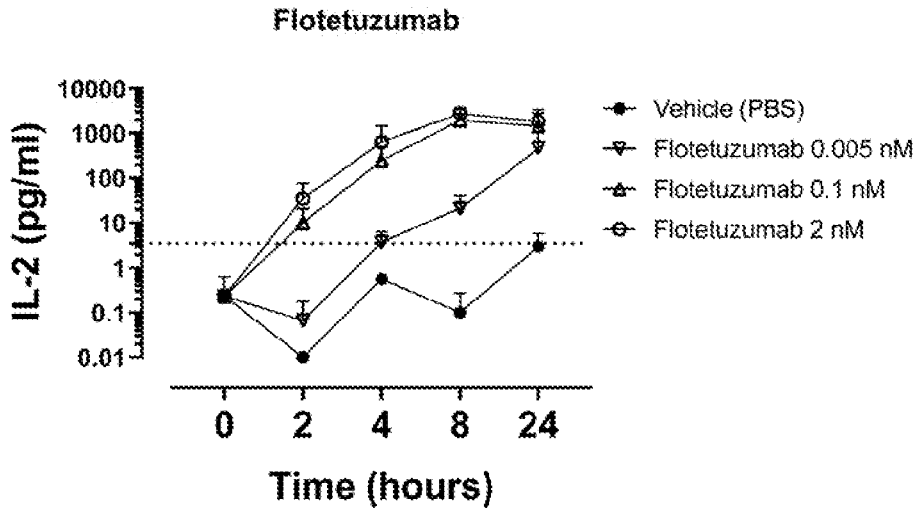


FIG. 10B

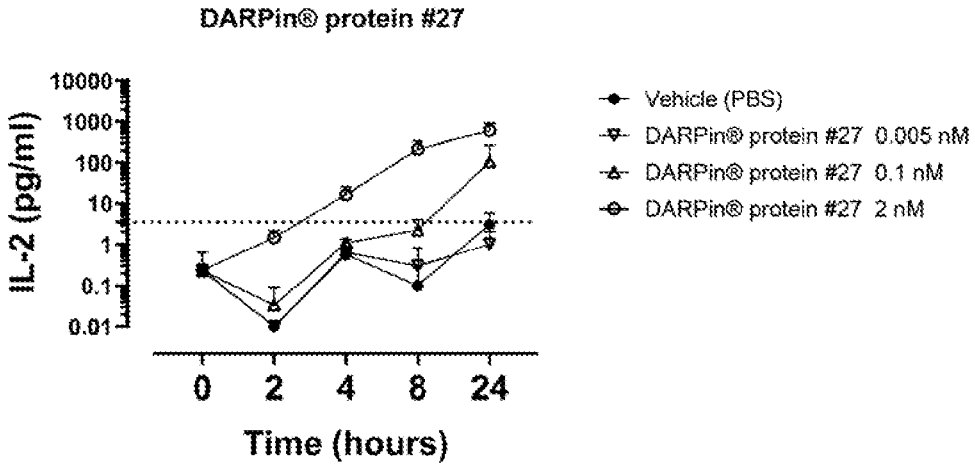


FIG. 10C

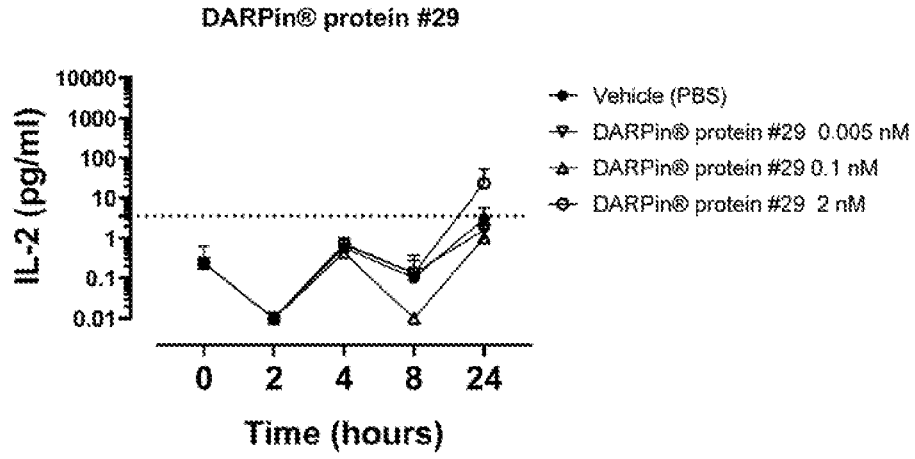


FIG. 10D

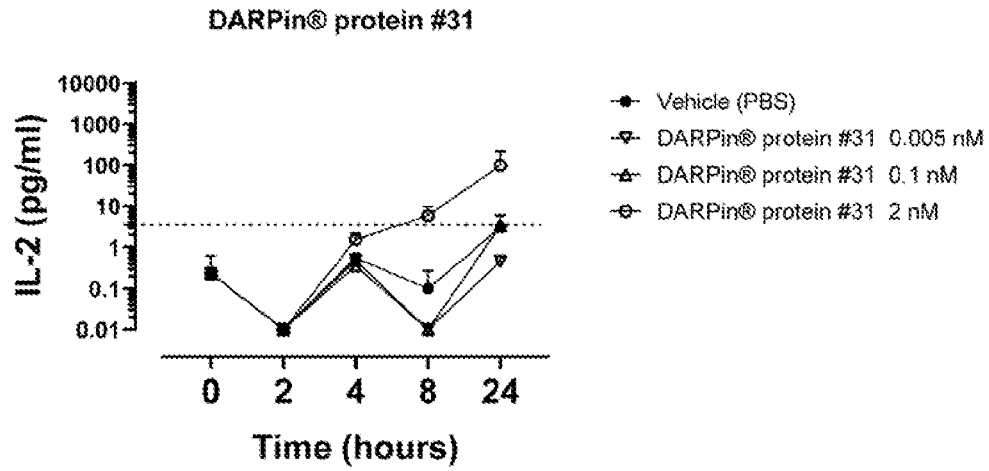


FIGURE 11 (A-D)

FIG. 11A

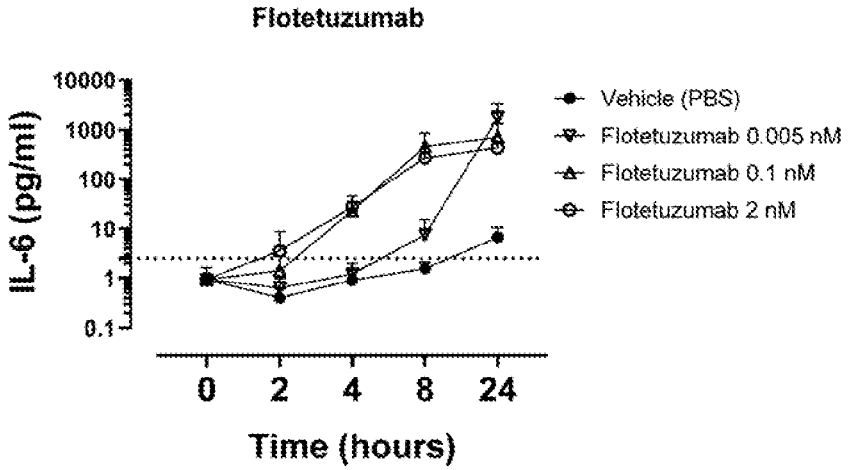


FIG. 11B

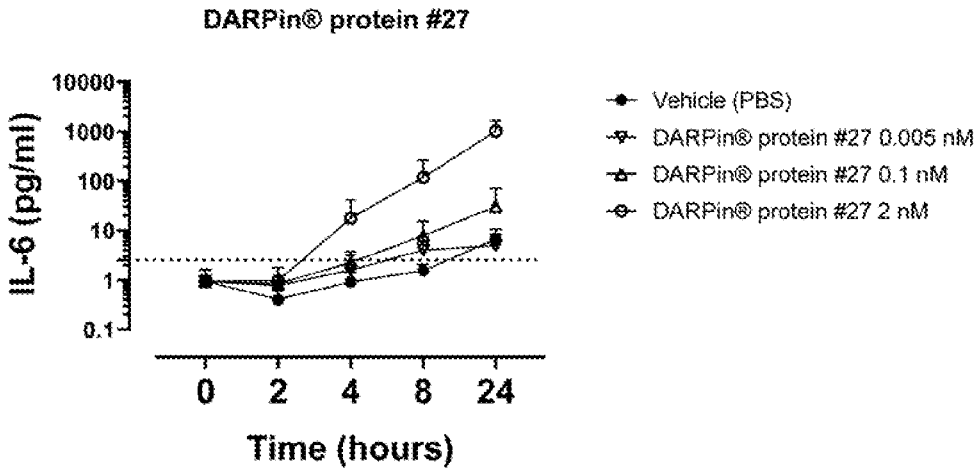


FIG. 11C

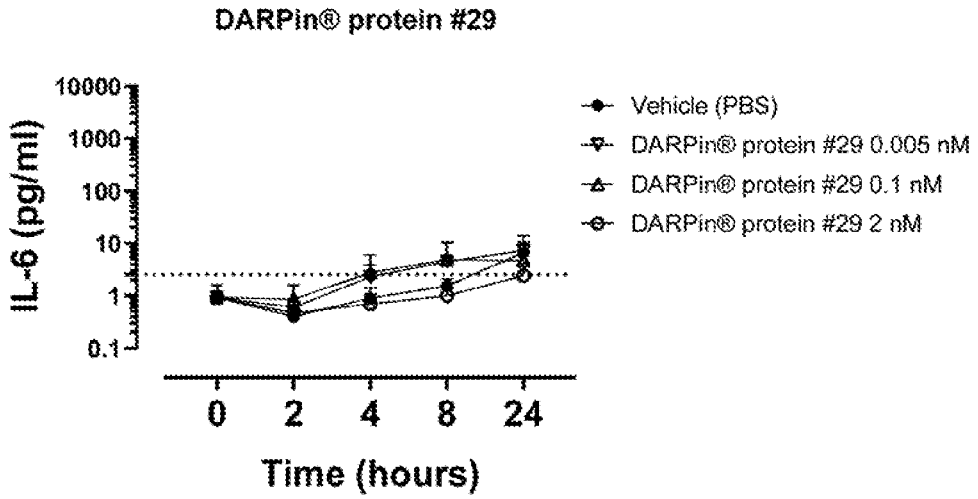


FIG. 11D

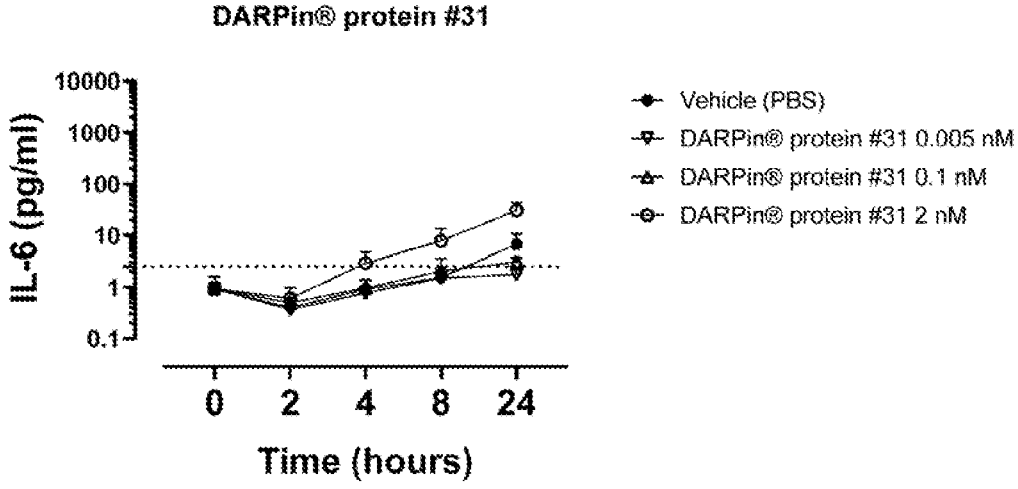


FIGURE 12 (A-D)

FIG. 12A

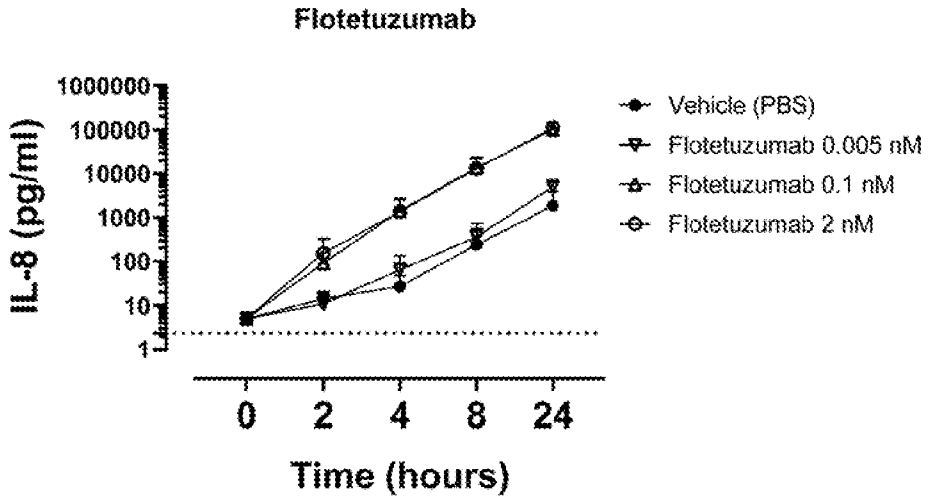


FIG. 12B

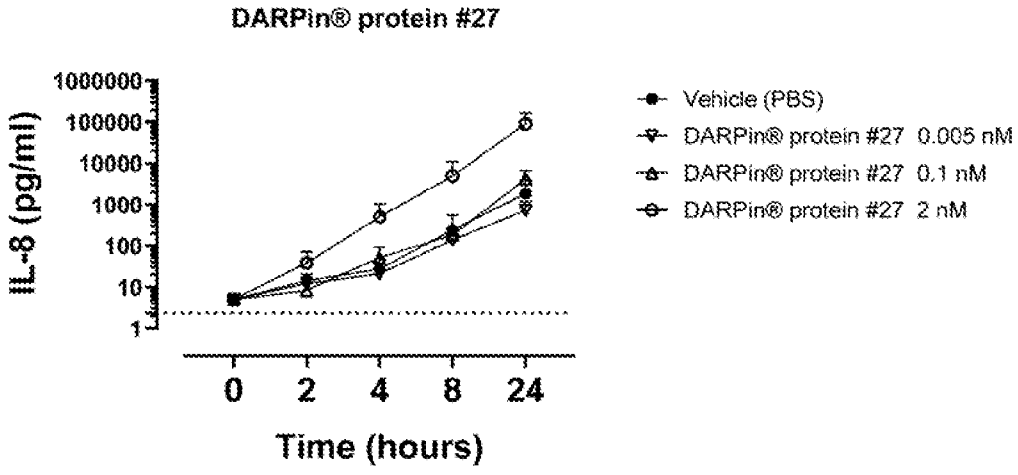


FIG. 12C

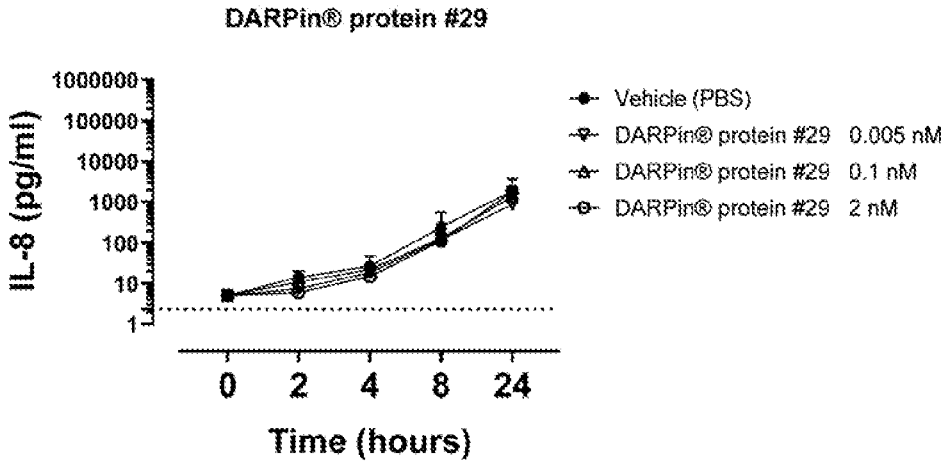


FIG. 12D

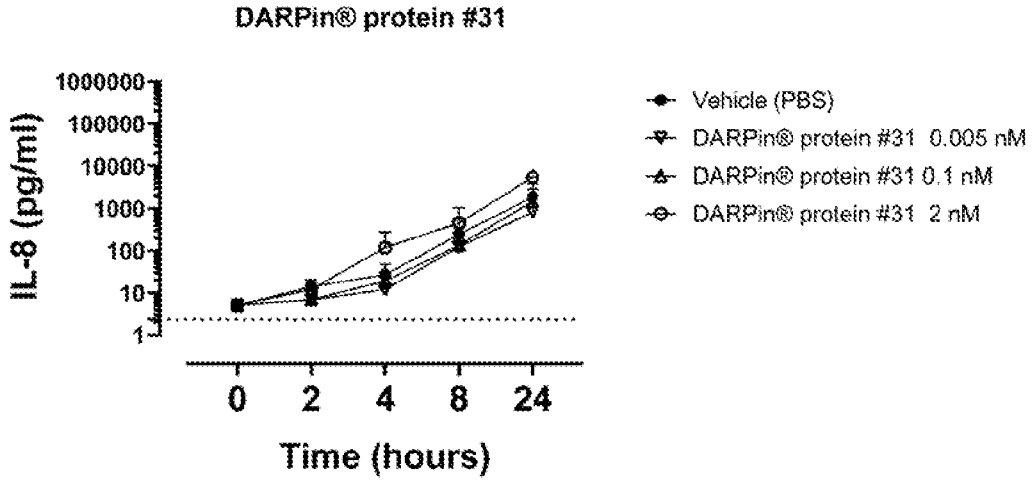


FIGURE 13 (A-D)

FIG. 13A

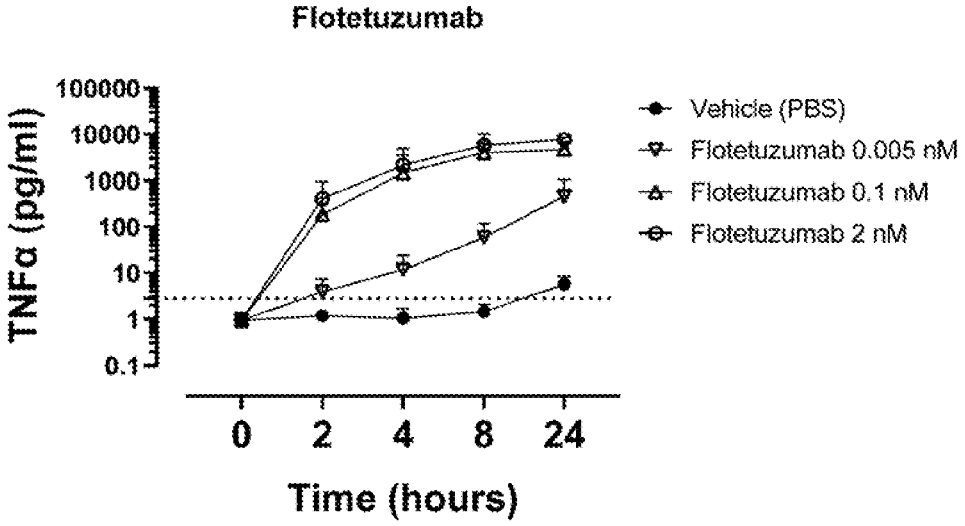


FIG. 13B

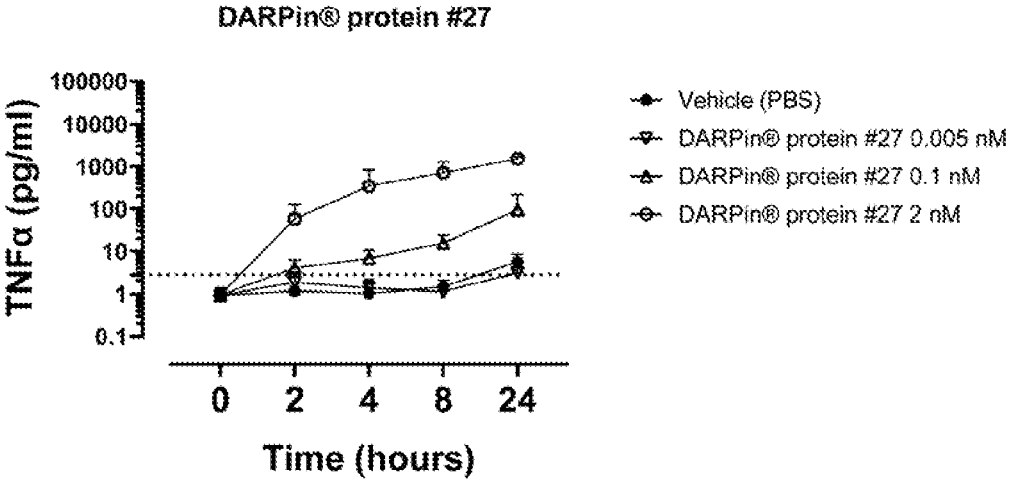


FIG. 13C

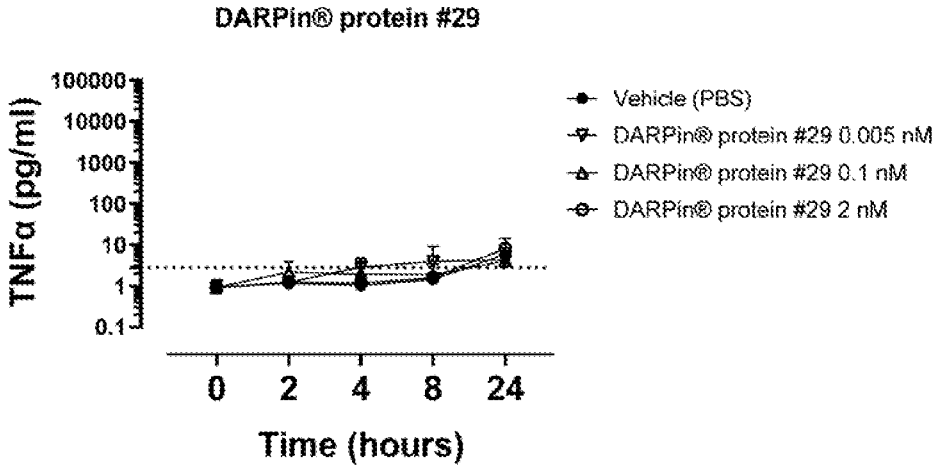


FIG. 13D

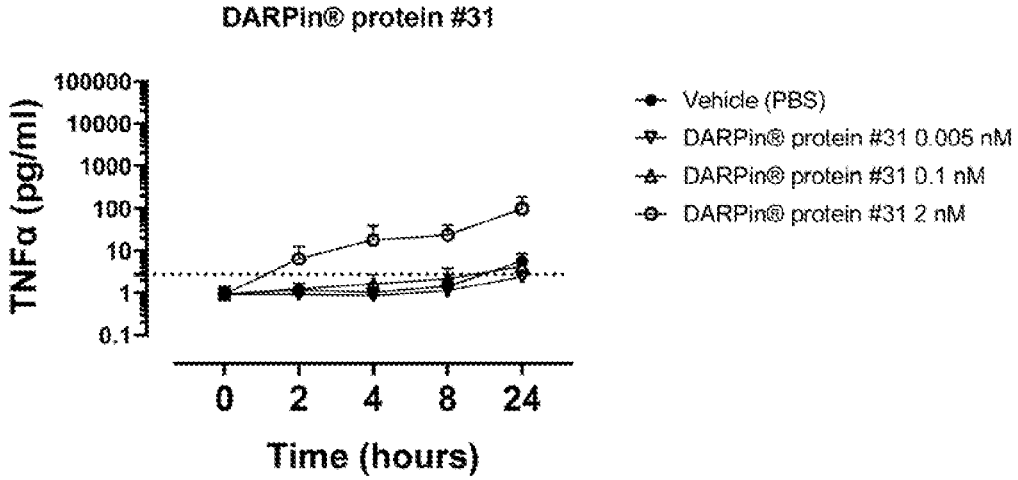


FIGURE 14 (A-D)

FIG. 14A

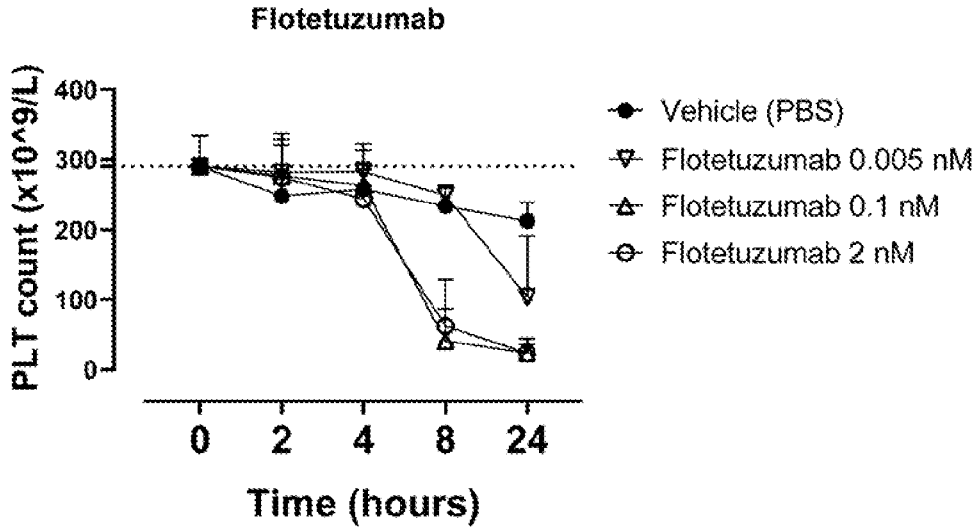


FIG. 14B

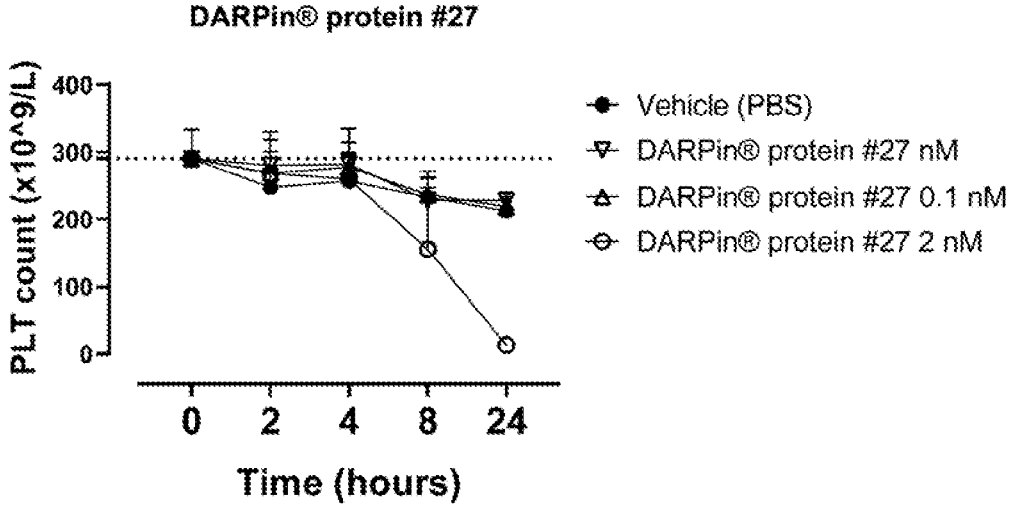


FIG. 14C

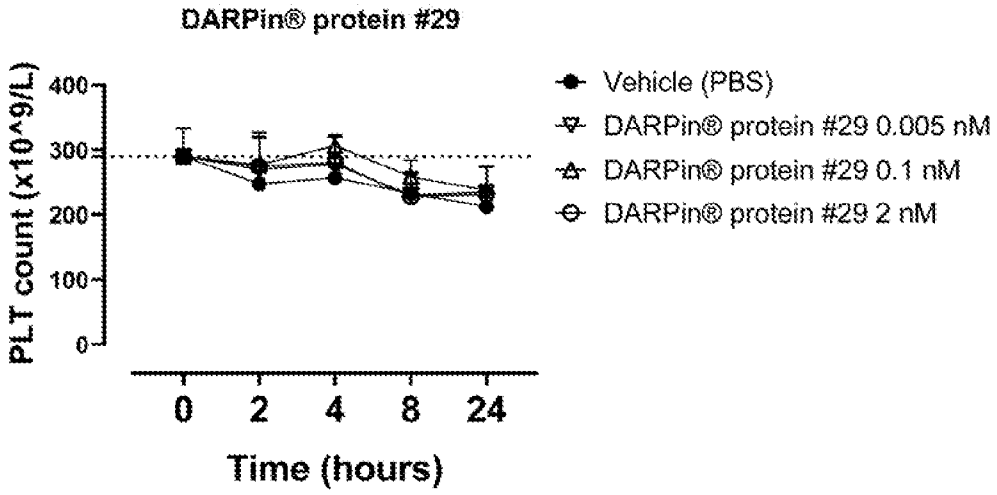


FIG. 14D

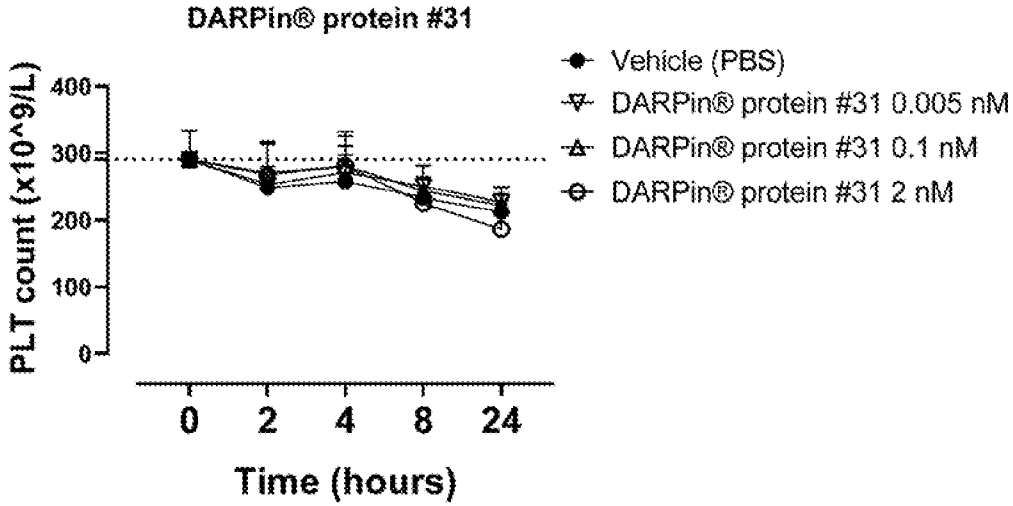


FIGURE 15 (A-B)

FIG. 15A

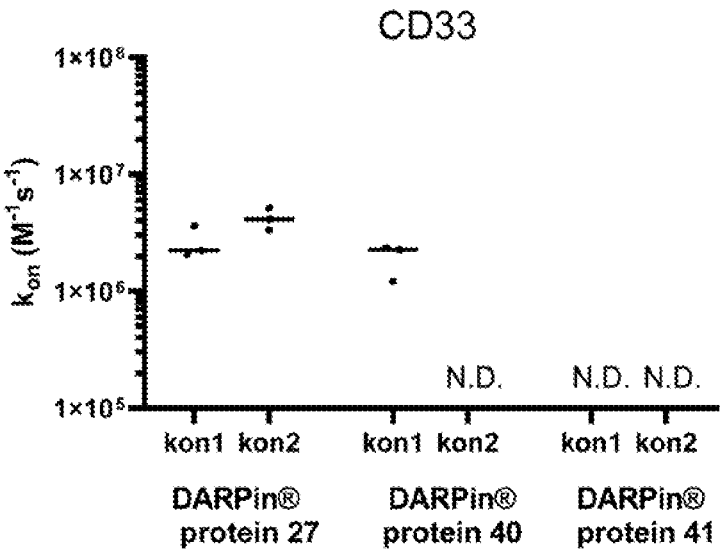


FIG. 15B

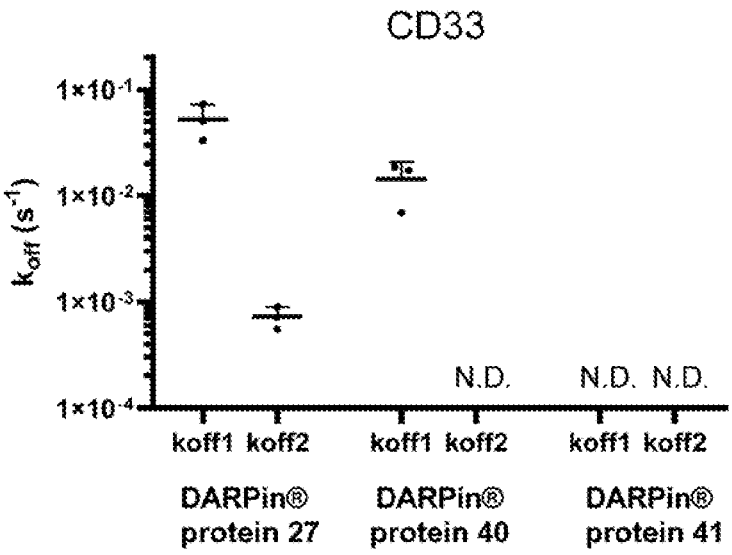


FIGURE 16 (A-B)

FIG. 16A

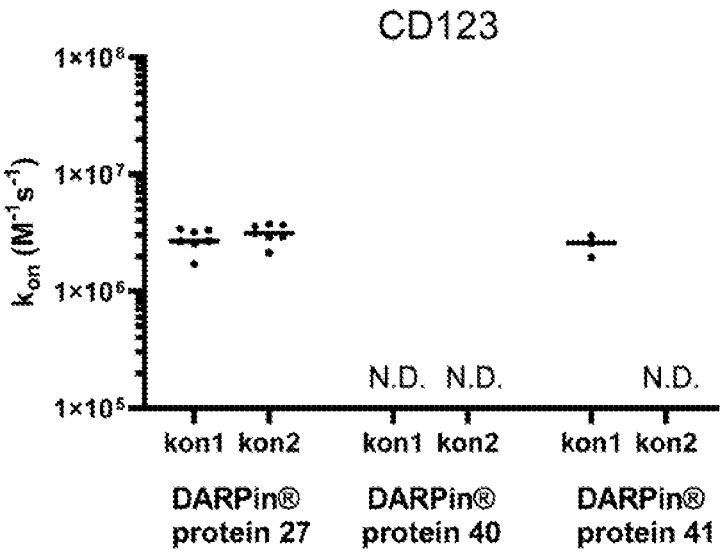


FIG. 16B

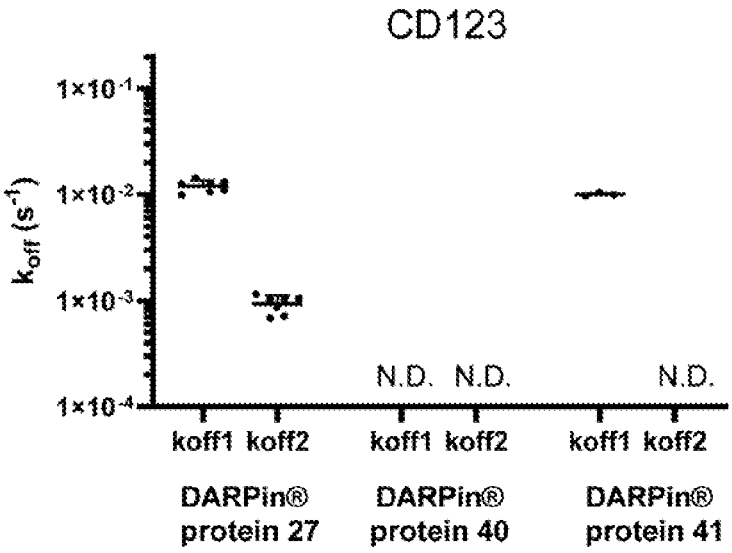


FIGURE 17

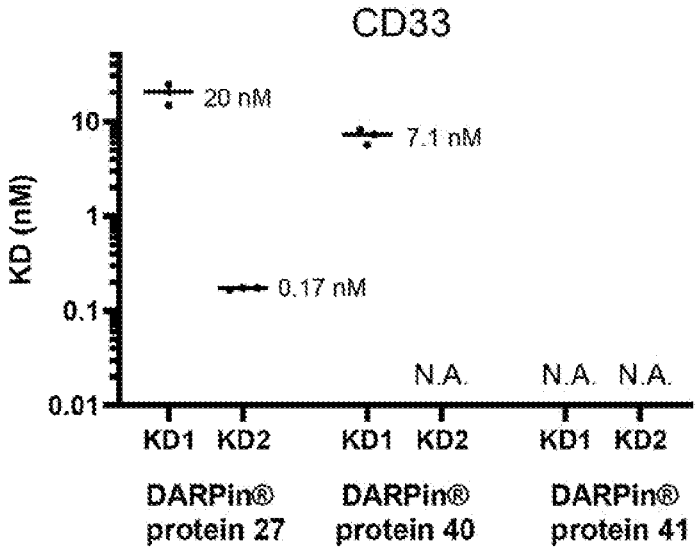


FIGURE 18

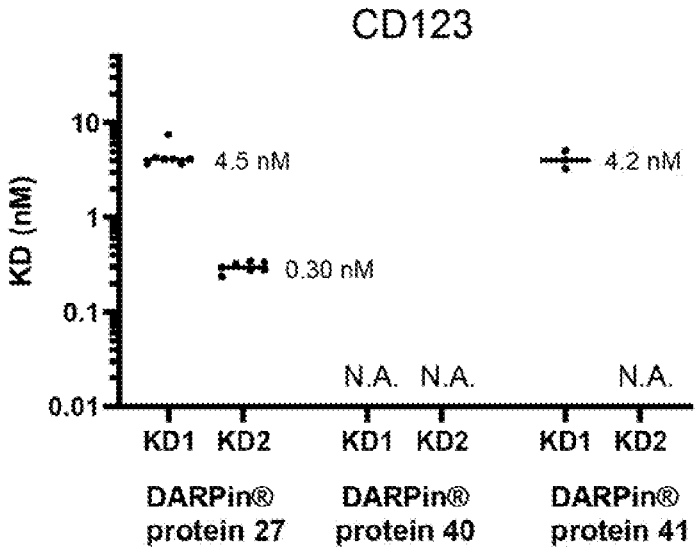

CD123
KD (nM)
10
1
0.1
0.01
4.5 nM
0.30 nM
4.2 nM
N.A.
N.A.
N.A.
KD1
KD2
KD1
KD2
KD1
KD2
DARPin® protein 27
DARPin® protein 40
DARPin® protein 41

FIGURE 19

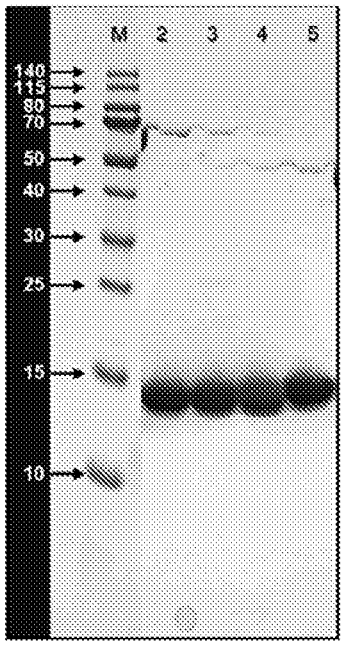
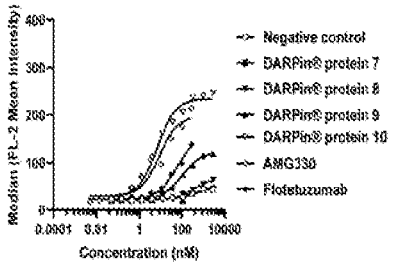


FIGURE 20 (A-B)

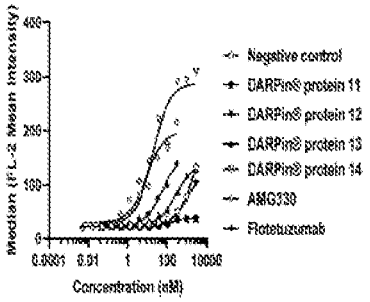
FIG. 20A



CD123	CD33	Ni2C
CD123	CD33	CD3 (C7v118)
CD123	CD33	CD3 (C7v119)
CD123	CD33	CD3 (C7v122)
CD123	CD33	CD3 (C7v127)

	TLO737	TLO768	TLO769	TLO772	TLO777	AMG330	Flotetuzumab
EC50	286	642	396	98	7	9	56

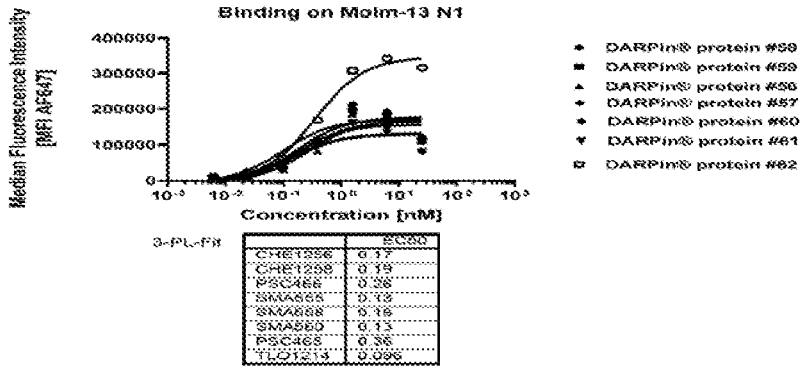
FIG.20B



H04	CD123	CD33	Ni2C
H04	CD123	CD33	CD3 (C7v118)
H04	CD123	CD33	CD3 (C7v119)
H04	CD123	CD33	CD3 (C7v122)
H04	CD123	CD33	CD3 (C7v127)

	TLO745	TLO803	TLO801	TLO802	TLO810	AMG330	Flotetuzumab
EC50	2475	139	1838	274	19	8	56

FIG. 20C



	EC50
CHE1256	0.17
CHE1258	0.19
PSC466	0.36
SMA865	0.13
SMA868	0.16
SMA860	0.11
PSC465	0.36
TLO1214	0.096

FIGURE 21

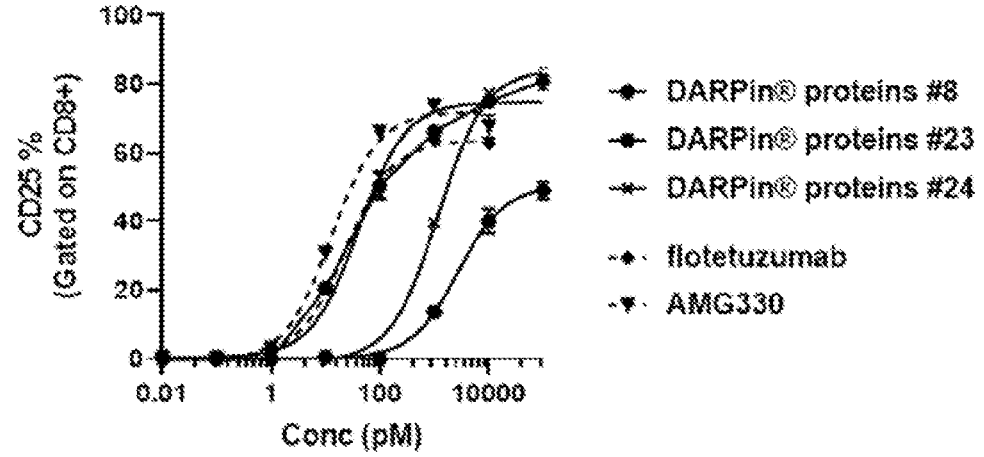
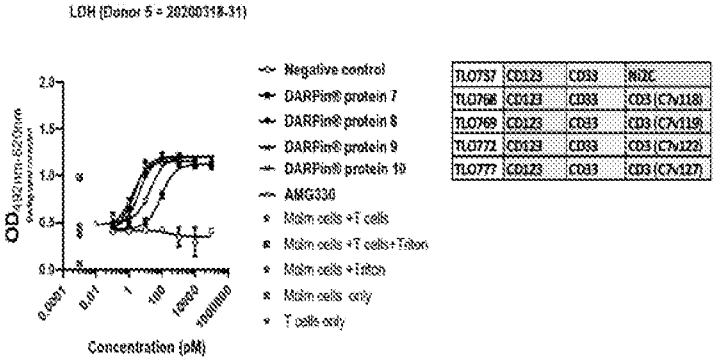


FIGURE 22 (A-B)

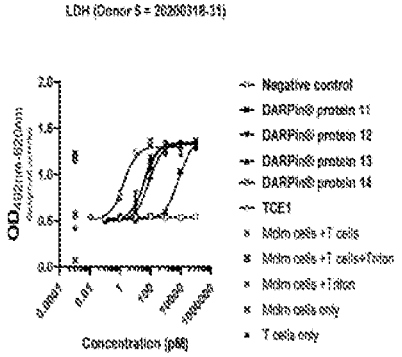
FIG. 22A



TLO737	CD123	CD33	REC
TLO768	CD123	CD33	CD3 (C7v118)
TLO769	CD123	CD33	CD3 (C7v119)
TLO772	CD123	CD33	CD3 (C7v122)
TLO777	CD123	CD33	CD3 (C7v127)

	TLO737	TLO768	TLO769	TLO772	TLO777	AMG330 CD33_CD3
EC50	322	87	2	4	29	2

FIG. 22B

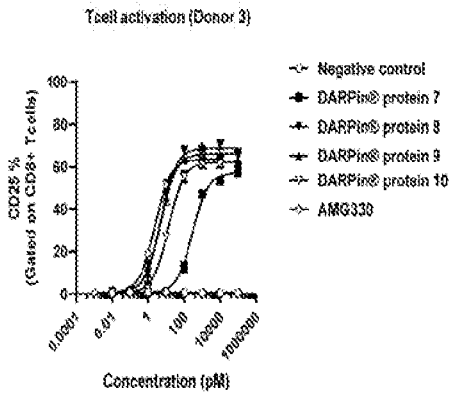


HI4	CD123	CD33	NI2C
HI4	CD123	CD33	CD3 (C7v118)
HI4	CD123	CD33	CD3 (C7v119)
HI4	CD123	CD33	CD3 (C7v122)
HI4	CD123	CD33	CD3 (C7v127)

	TLO735	TLO860	TLO861	TLO862	TLO865	AMG330 CD33_CD3
EC50	3	5776	37	38	77	2

FIGURE 23 (A-B)

FIG. 23A



TLO737	CD123	CD33	NI2C
TLO768	CD123	CD33	CD3 (C7v118)
TLO769	CD123	CD33	CD3 (C7v119)
TLO772	CD123	CD33	CD3 (C7v122)
TLO777	CD123	CD33	CD3 (C7v127)

	TLO737	TLO768	TLO769	TLO772	TLO777	AMG330 CD33_CD3
EC50	[redacted]	298	5	6	14	2

FIG. 23B

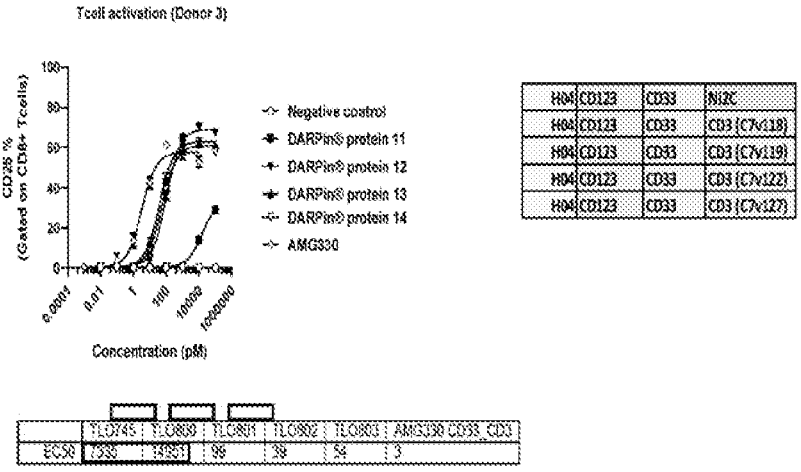


FIGURE 24 (A-B)

FIG. 24A

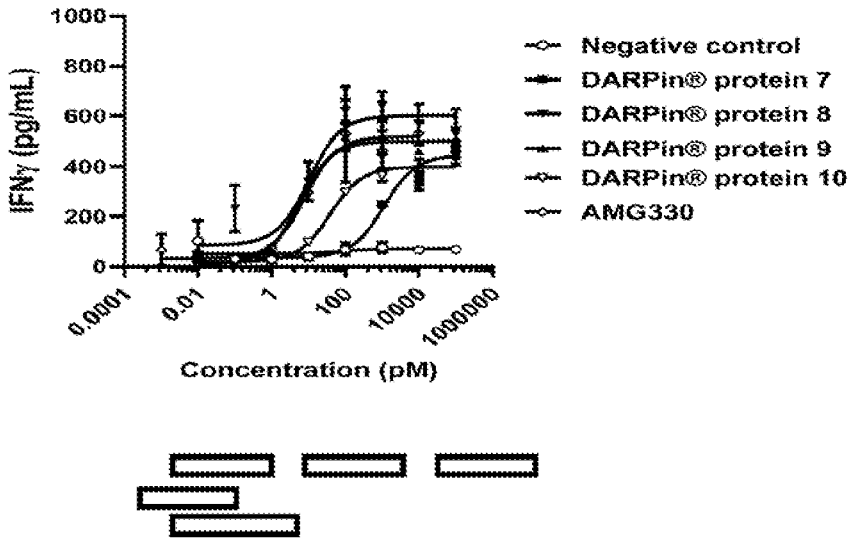


FIG. 24B

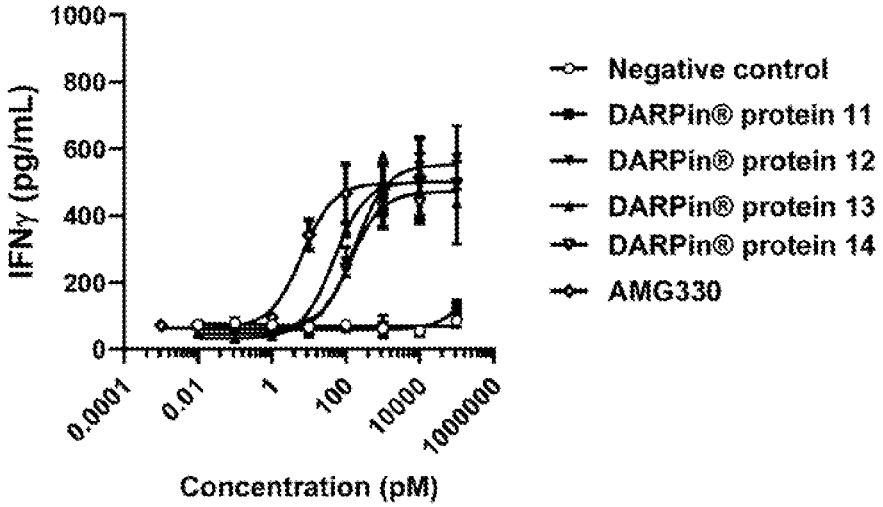


FIGURE 25

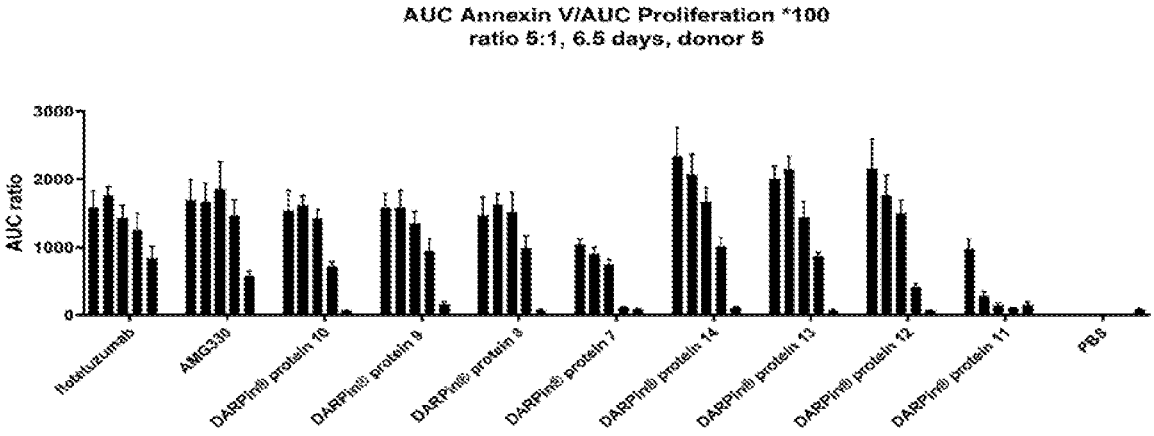
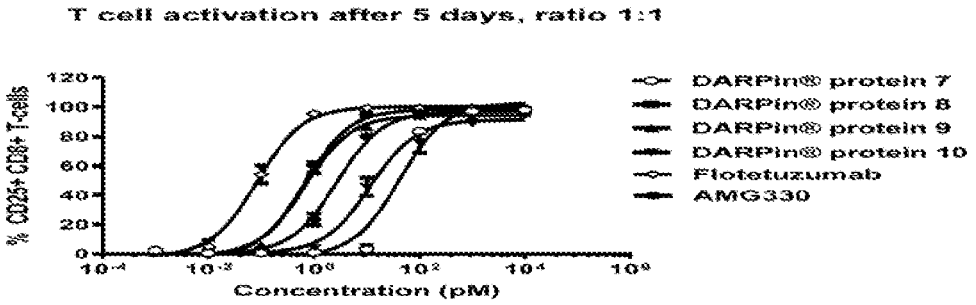


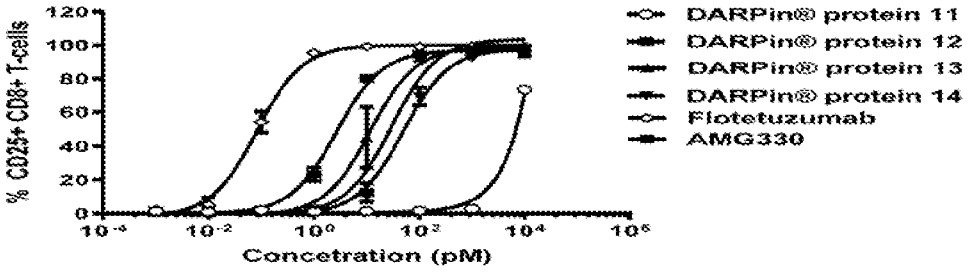
FIGURE 26 (A-B)

FIG. 26A



	EC50
TLO768 (C7v118)	41.80
TLO769 (C7v119)	0.8568
TLO772 (C7v122)	0.6862
TLO777 (C7v127)	11.39
TLO787	0.3067
TLO788	77.89
TLO791	0.614
TLO796	0.004617
TLO737	0.04659
MPEXT118 (CD123_DART)	0.08295
MPEXT120 (CD33-CD3 BITE)	2.677

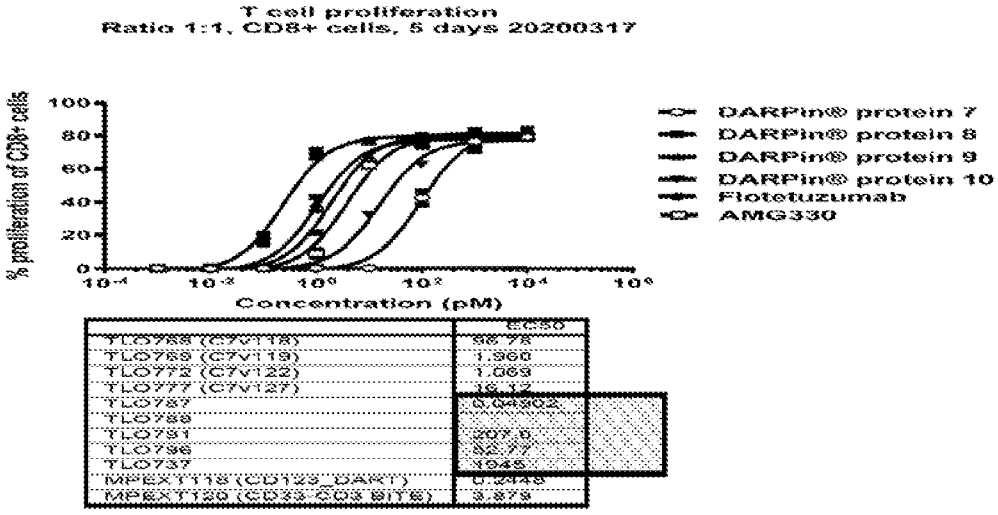
FIG. 26B



	EC50
TLO800	[illegible]
TLO801	29.59
TLO802	11.73
TLO803	49.18
TLO745	[illegible]
MPEXT118 (CD123_DART)	0.08295
MPEXT120 (CD33-CD3 BITE)	2.677

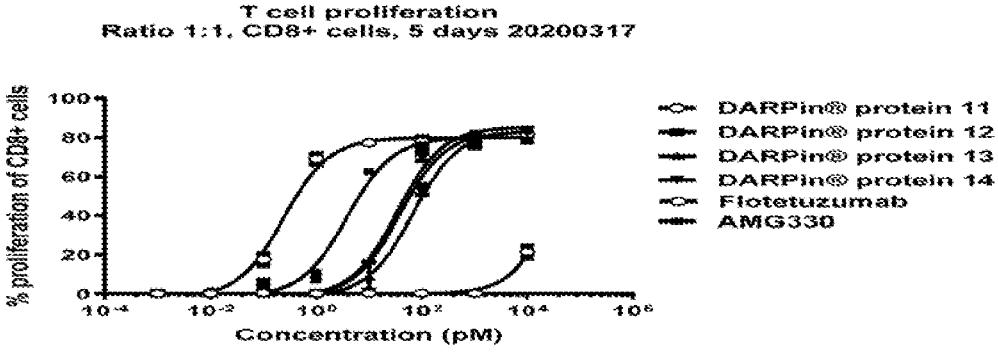
FIGURE 27 (A-B)

FIG. 27A



	EC50
TLO768 (C7V118)	88.78
TLO769 (C7V119)	1.960
TLO772 (C7V122)	1.069
TLO777 (C7V127)	16.12
TLO787	0.045[illegible]
TLO788	[illegible]
TLO791	207.6
TLO796	82.77
TLO737	1045
MPEXT118 (CD123_DART)	0.2448
MPEXT120 (CD33-CD3 BITE)	3.879

FIG. 27B



	EC50
TLO800	~ 56313432
TLO801	38.30
TLO802	34.18
TLO803	87.98
TLO745	~ 91976
MPEXT118 (CD123_DART)	0.2448
MPEXT120 (CD33-CD3 BITE)	3.879

FIGURE 28 (A-F)

FIG. 28A

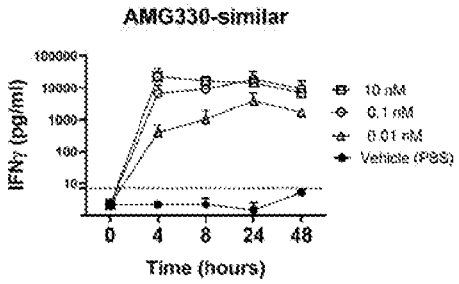


FIG.28B

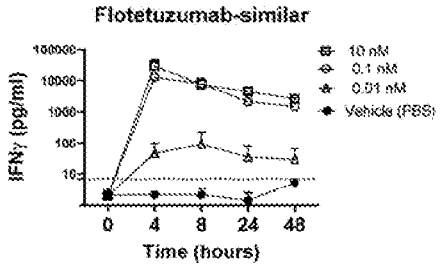


FIG.28C

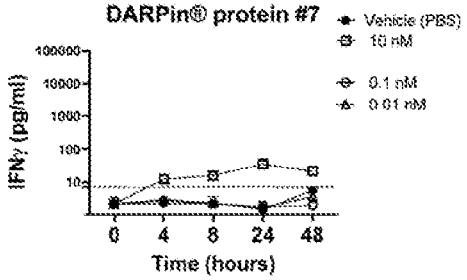


FIG.28D

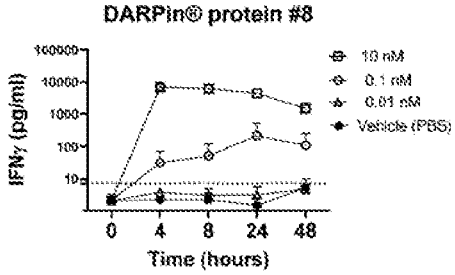


FIG.28E

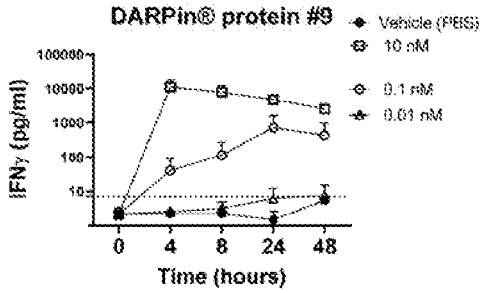


FIG.28F

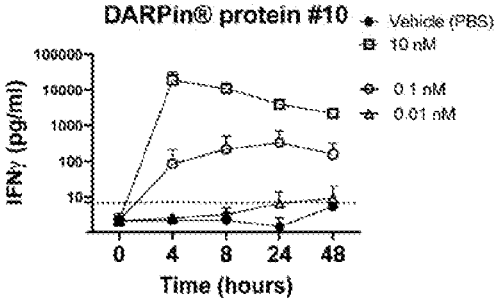


FIGURE 29 (A-F)

FIG. 29A

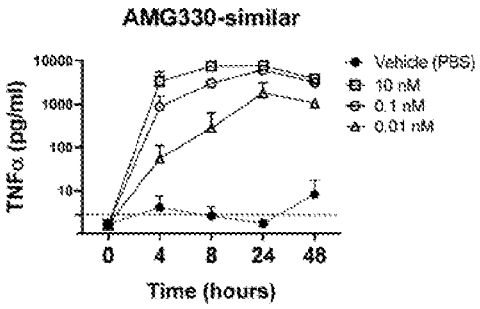


FIG. 29B

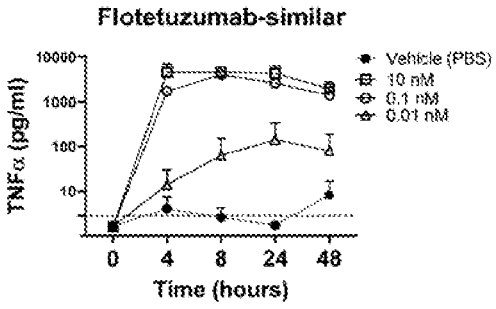


FIG. 29C

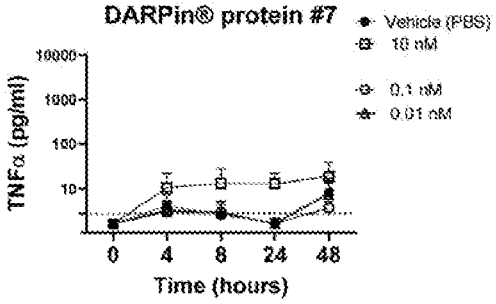


FIG. 29D

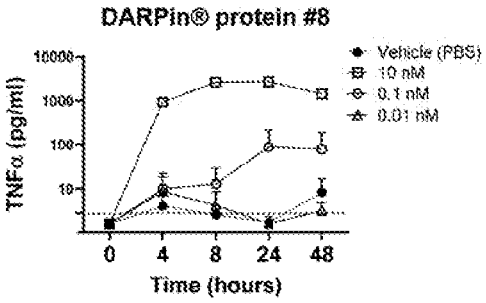


FIG. 29E

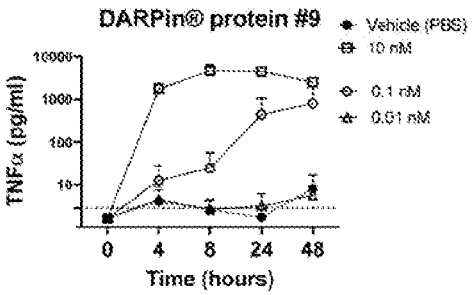


FIG. 29F

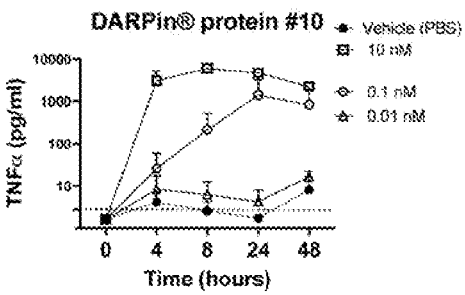


FIGURE 30 (A-F)

FIG. 30A

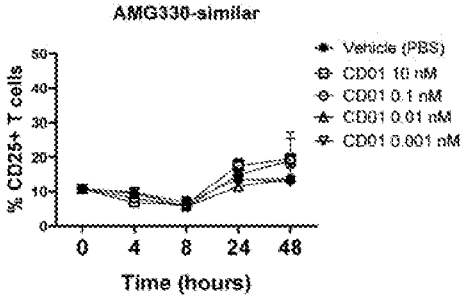


FIG. 30B

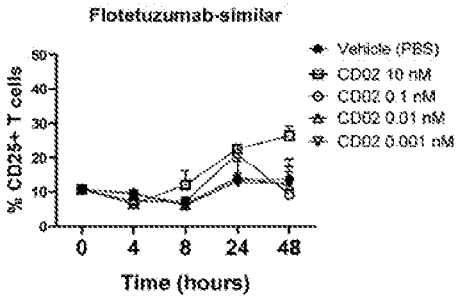


FIG. 30C

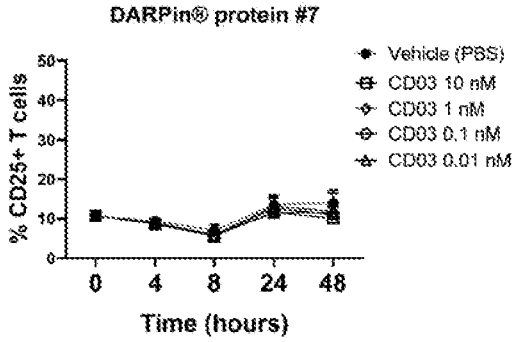


FIG. 30D

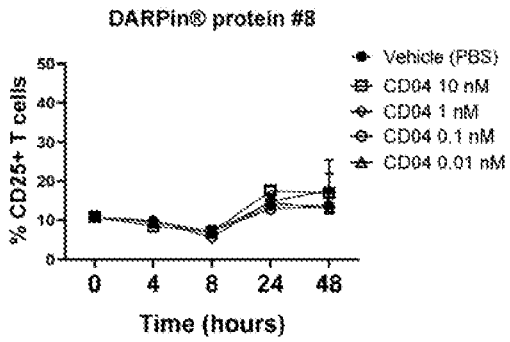


FIG. 30E

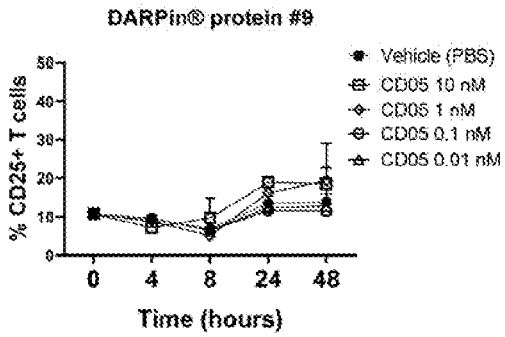


FIG. 30F

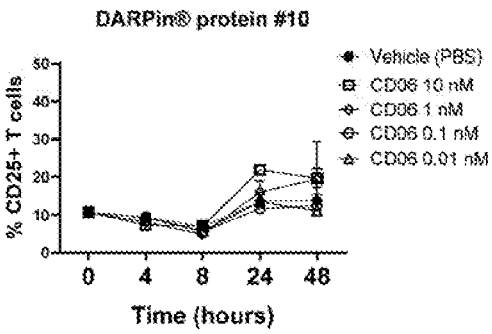


FIGURE 31 (A-F)

FIG. 31A

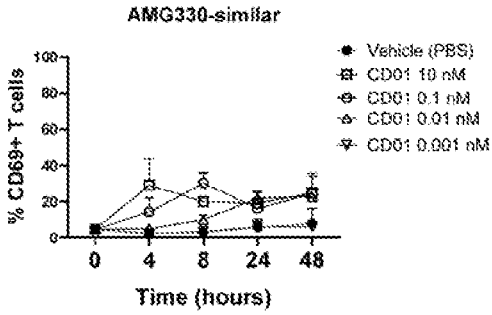


FIG. 31B

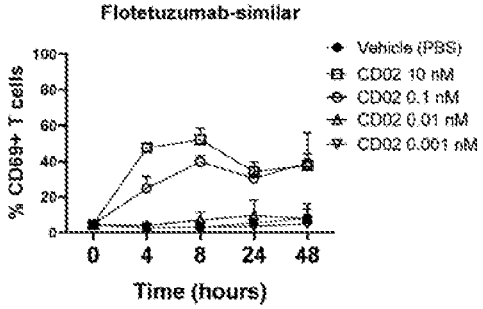


FIG. 31C

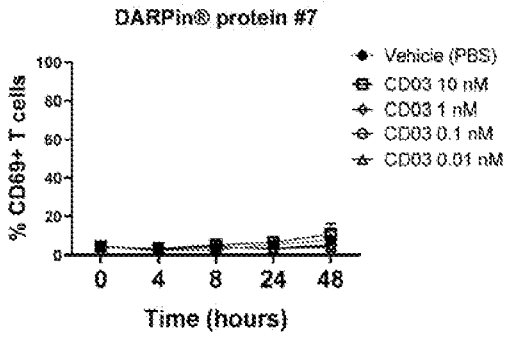


FIG.31D

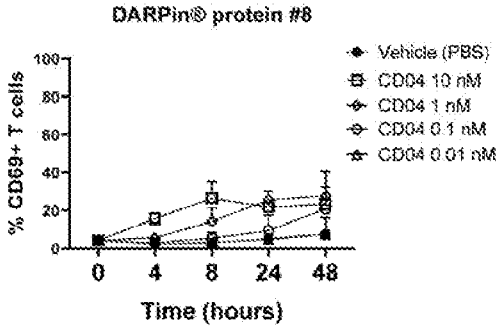


FIG. 31E

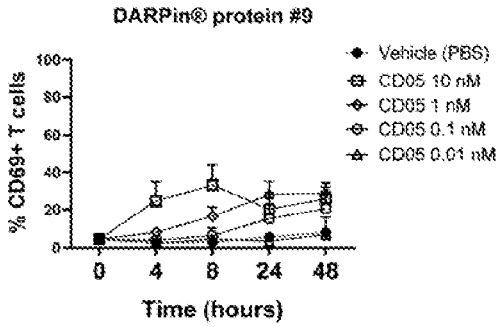


FIG. 31F

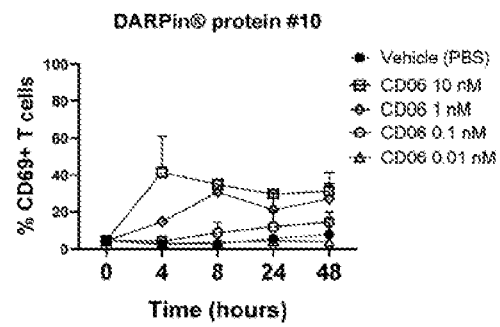


FIGURE 32 (A-F)

FIG. 32A

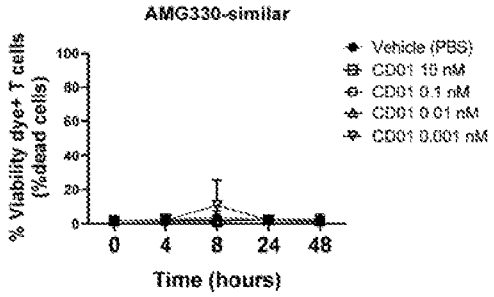


FIG.32B

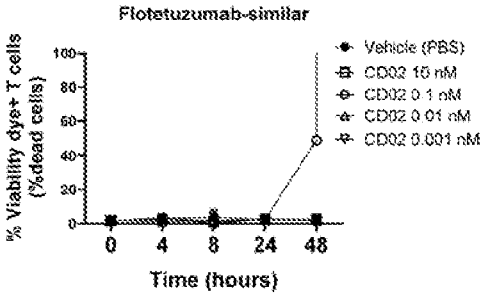


FIG. 32C

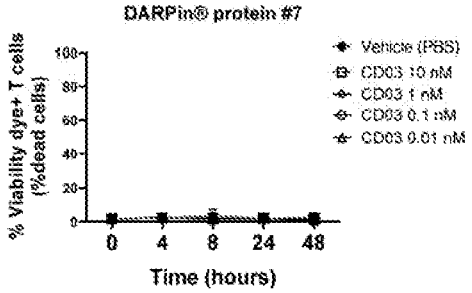


FIG.32D

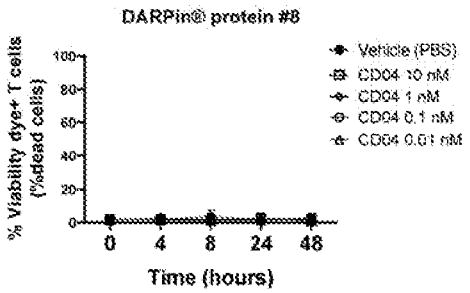


FIG. 32E

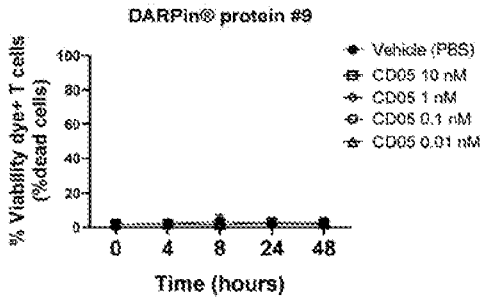


FIG. 32F

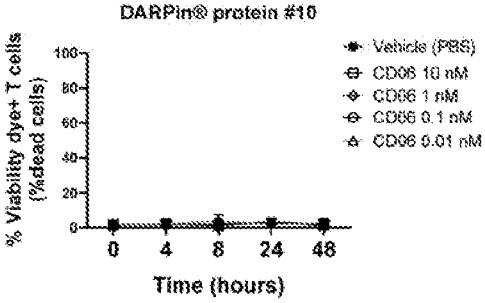


FIGURE 33 (A-F)

FIG. 33A

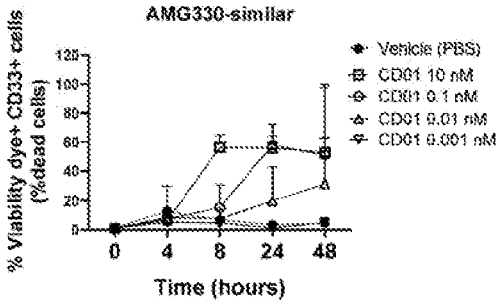


FIG. 33B

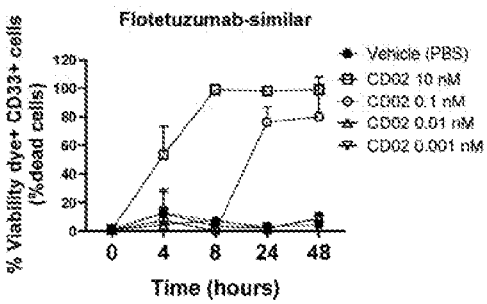


FIG. 33C

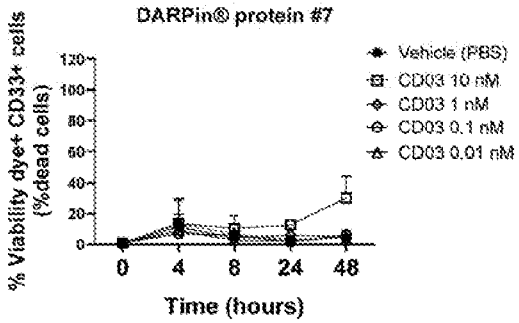


FIG. 33D

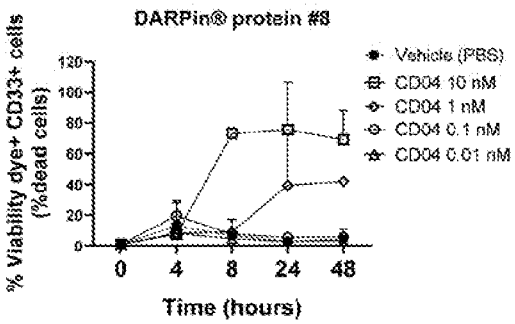


FIG. 33E

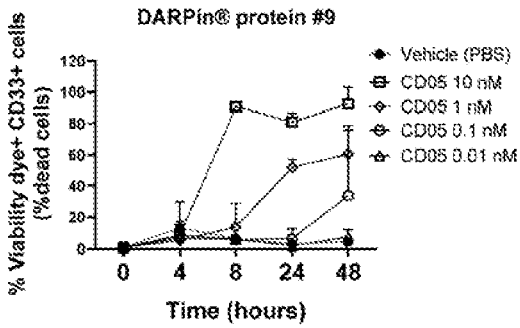


FIG. 33F

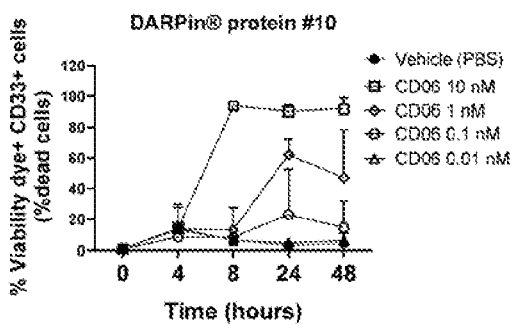


FIGURE 34 (A-B)

FIG. 34A

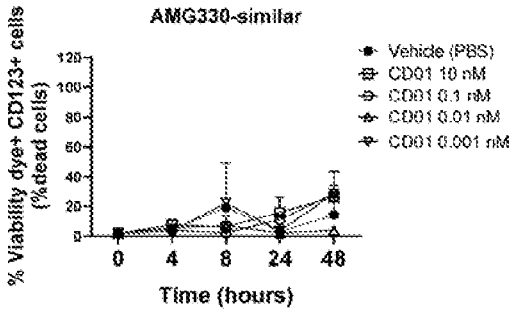


FIG. 34B

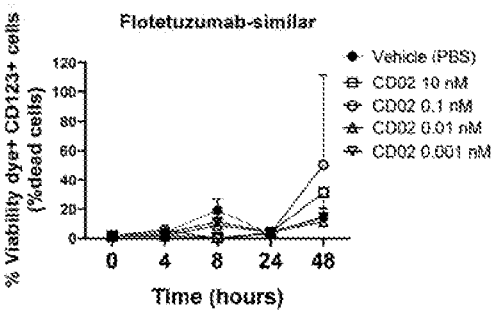


FIG. 34C

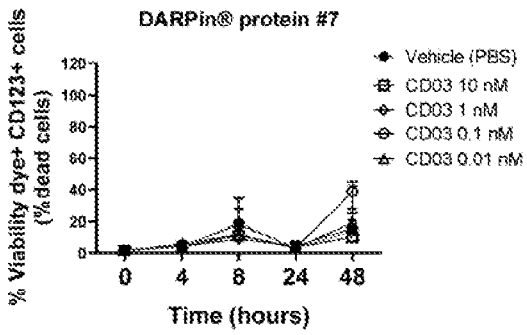


FIG. 34D

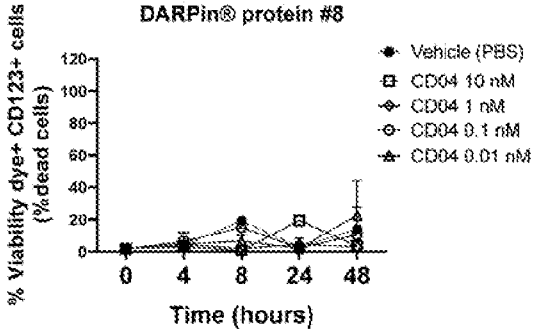


FIG. 34E

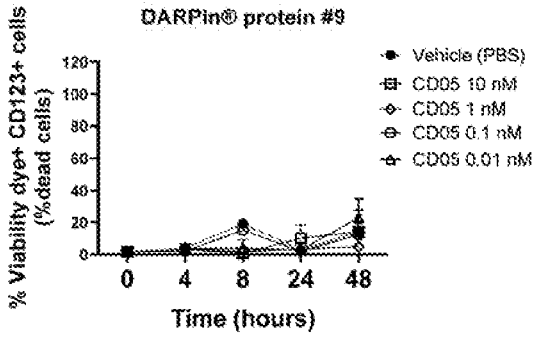


FIG. 34F

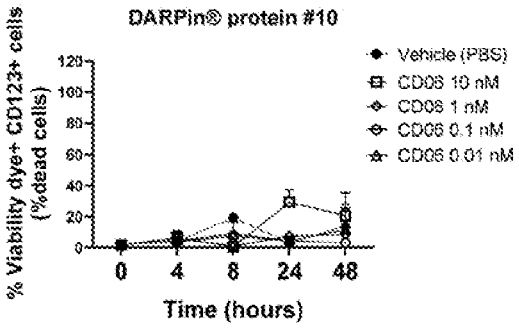


FIGURE 35 (A-F)

FIG. 35A

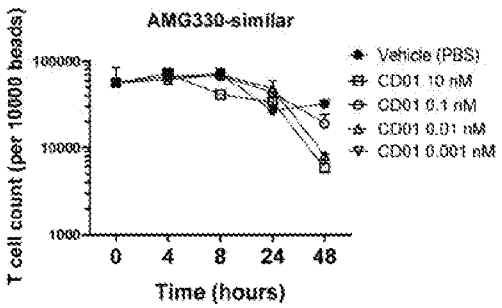


FIG. 35B

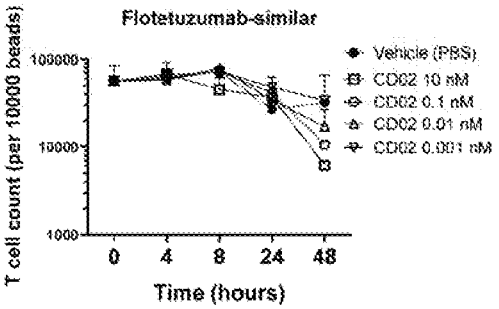


FIG. 35C

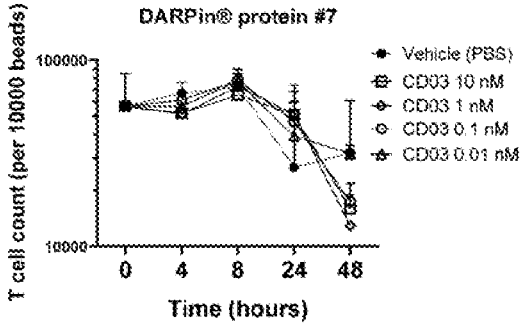


FIG 35D

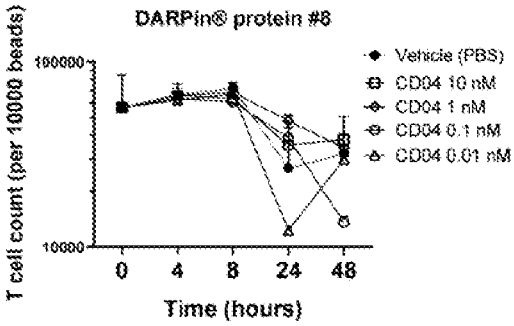


FIG. 35E

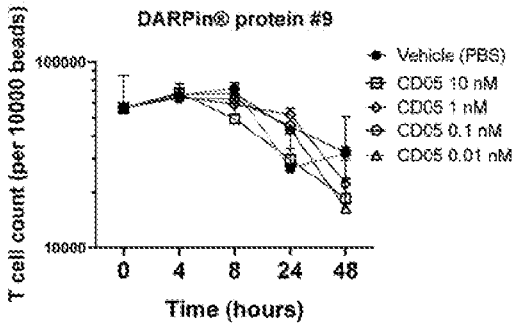


FIG 35F

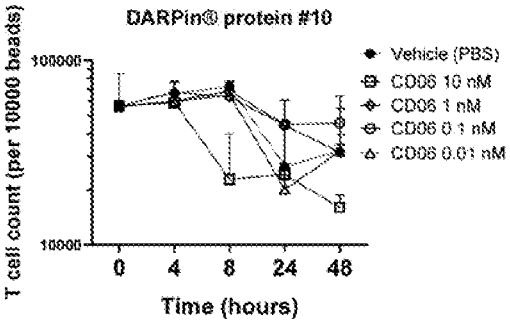


FIGURE 36 (A-F)

FIG. 36A

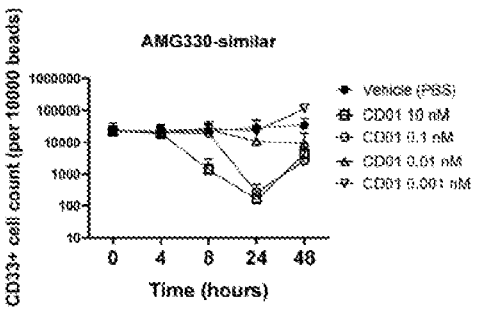


FIG. 36B

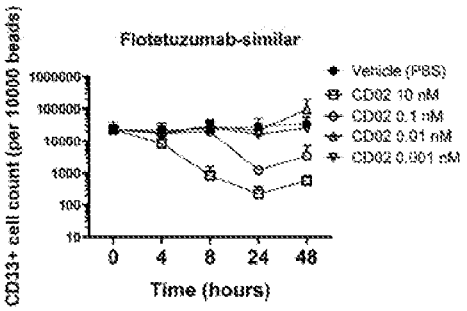


FIG. 36C

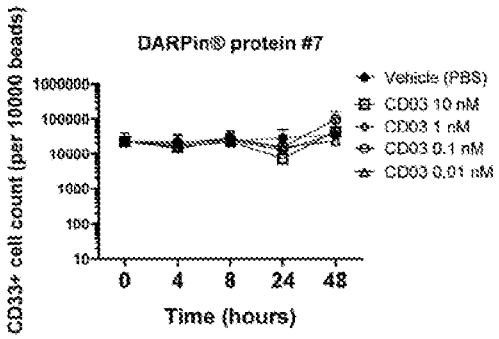


FIG. 36D

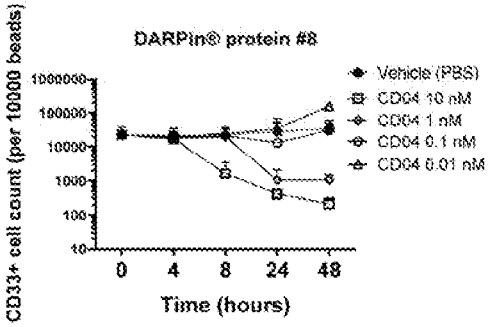


FIG. 36E

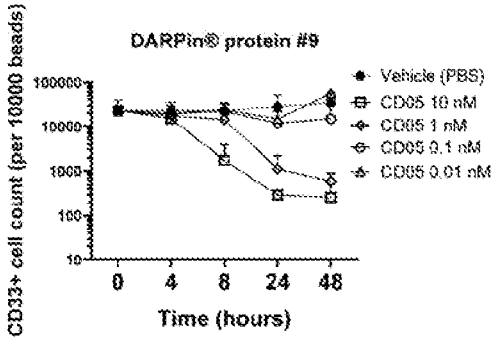


FIG. 36F

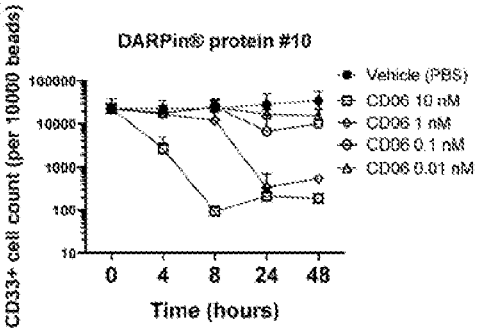


FIGURE 37 (A-F)

FIG. 37A

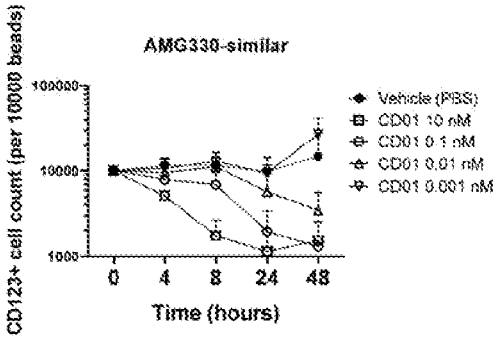


FIG. 37B

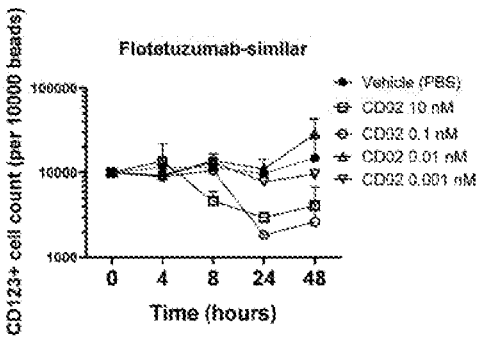


FIG. 37C

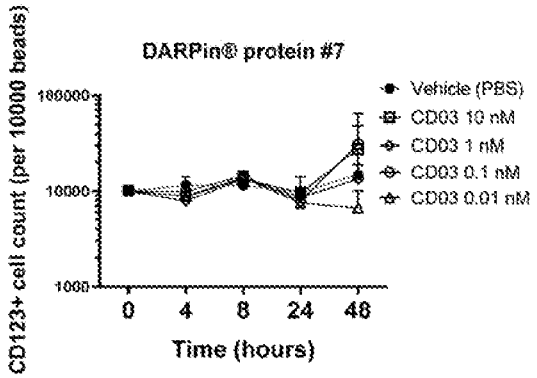


FIG. 37D

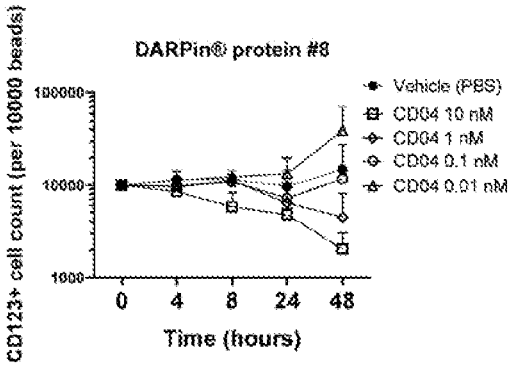


FIG. 37E

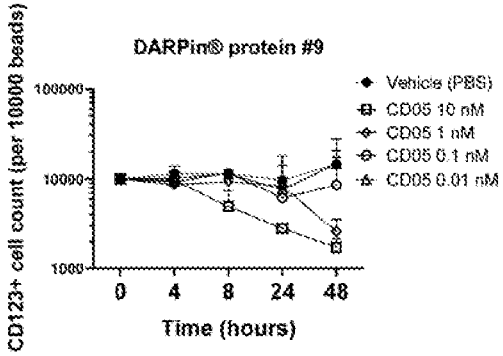


FIG. 37F

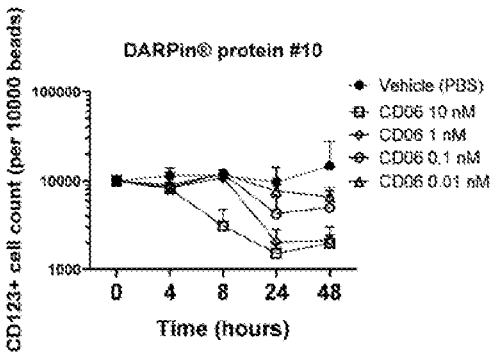


FIGURE 38 (A-B)

FIG. 38A

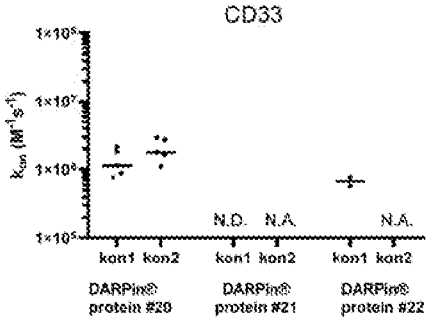


FIG. 38B

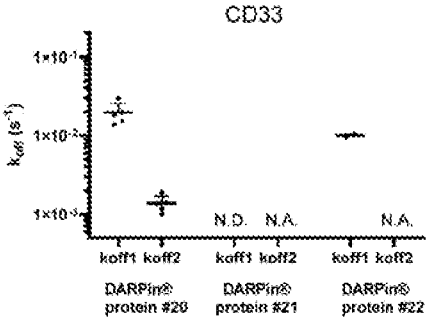


FIGURE 39 (A-B)

FIG. 39A

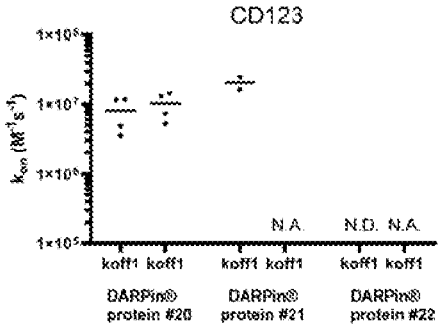


FIG. 39B

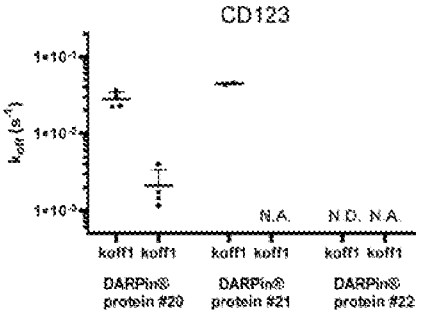


FIGURE 40

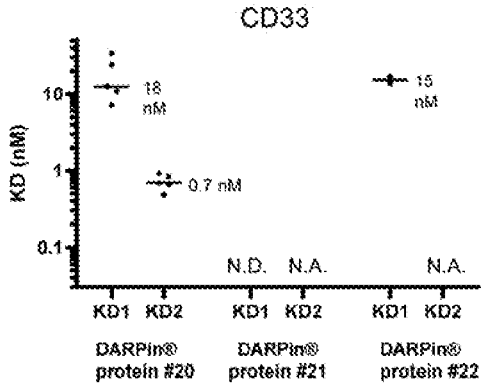


FIGURE 41

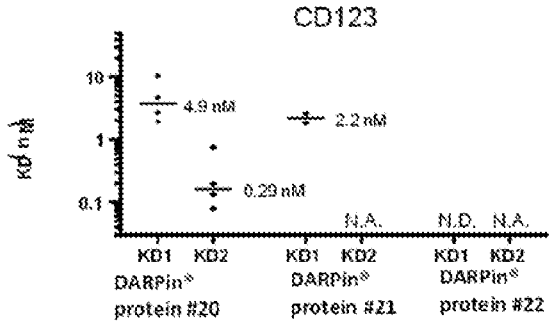


FIGURE 42 (A-C)

FIG. 42A

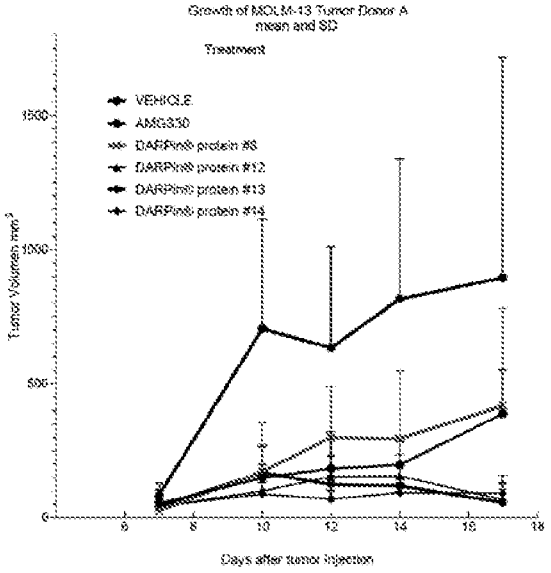


FIG. 42B

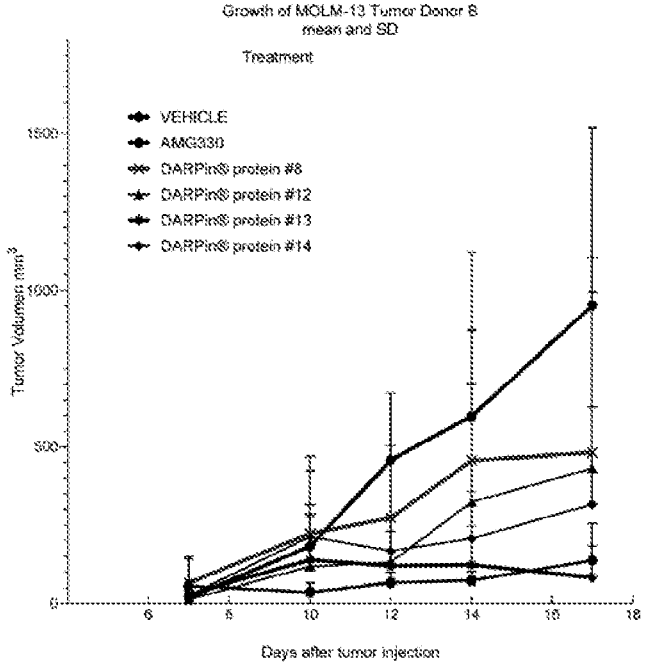


FIG. 42C

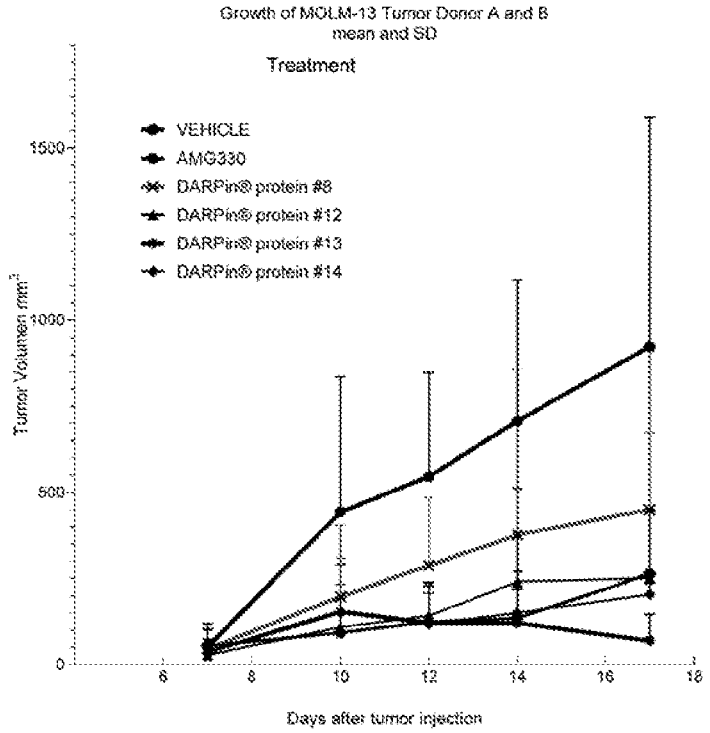


FIGURE 43 (A-L)

FIG. 43A

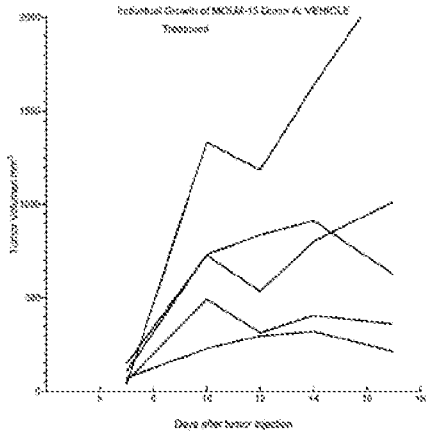


FIG. 43B

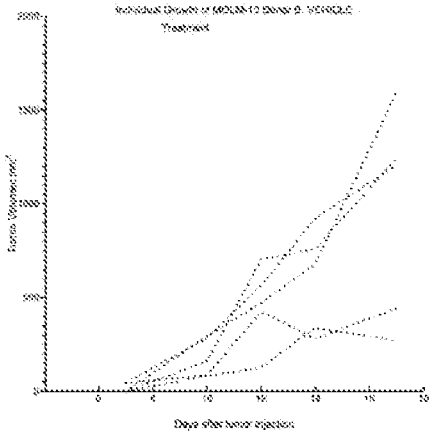


FIG. 43C

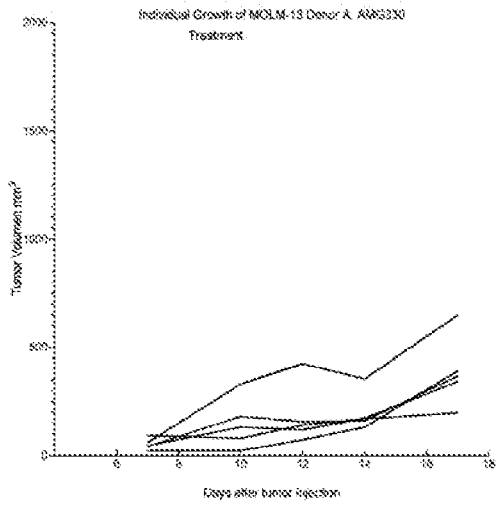


FIG. 43D

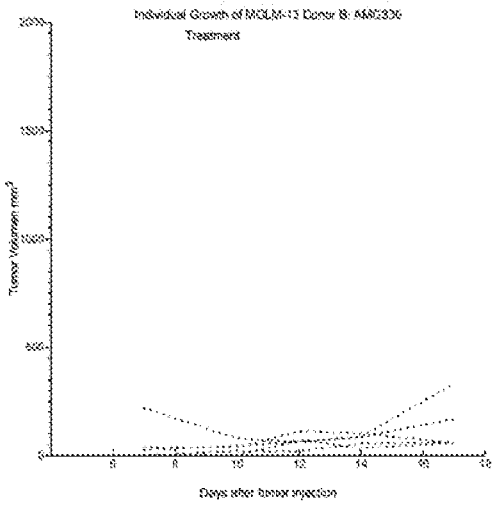


FIG. 43E

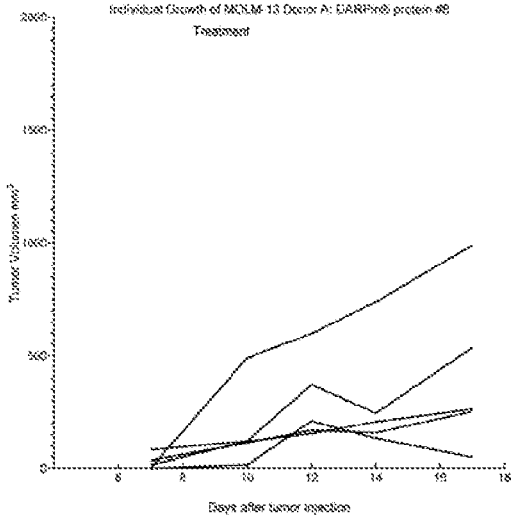


FIG. 43F

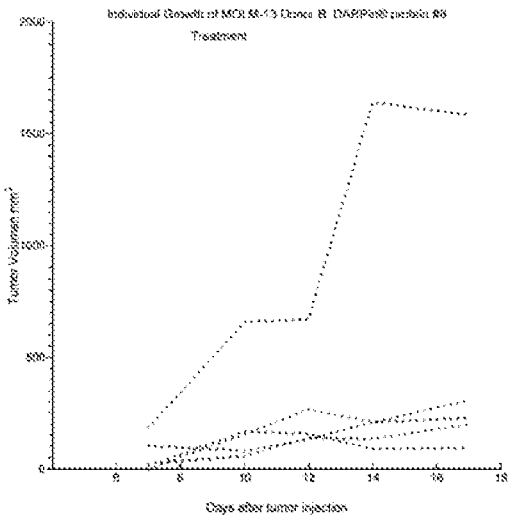


FIG. 43G

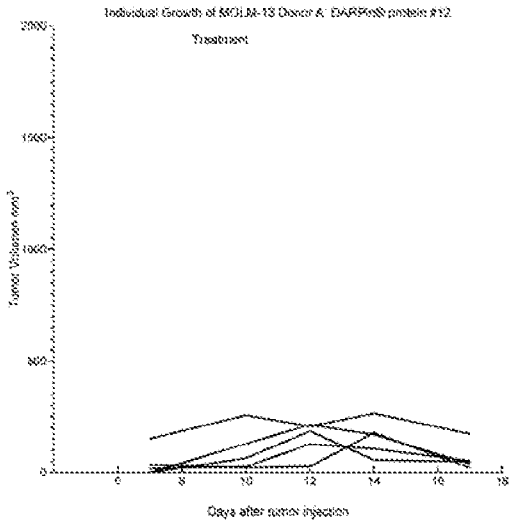


FIG. 43H

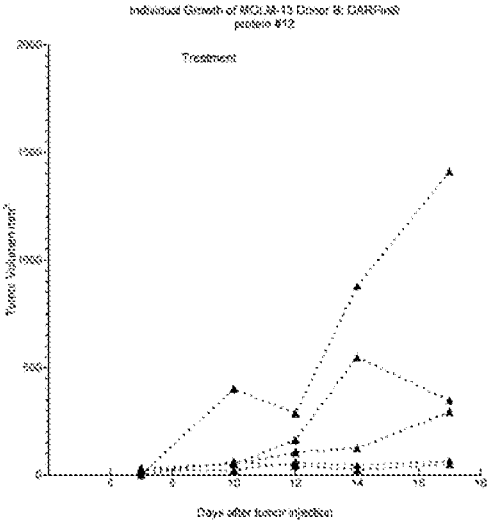


FIG 43I

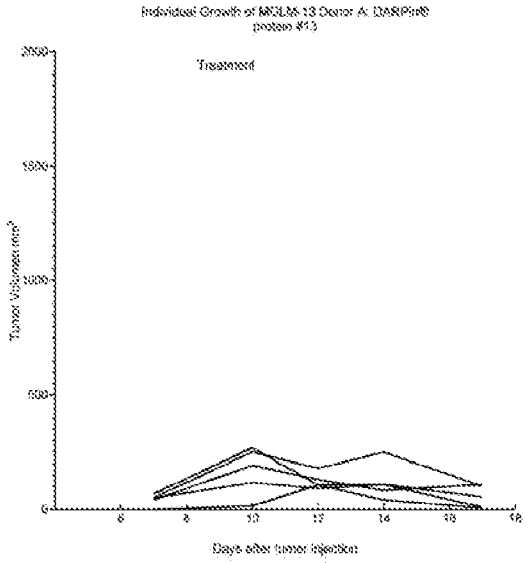


FIG. 43J

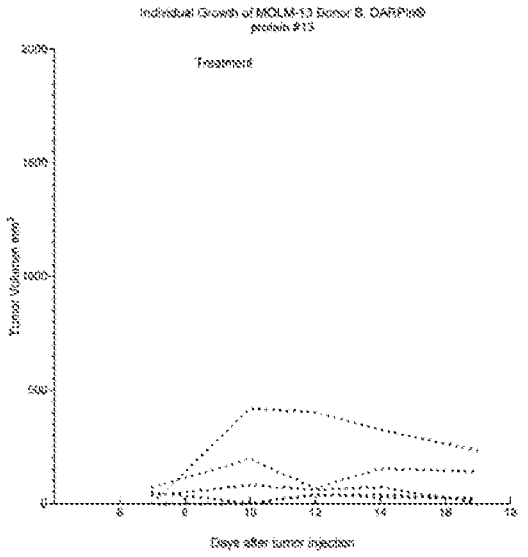


FIG. 43K

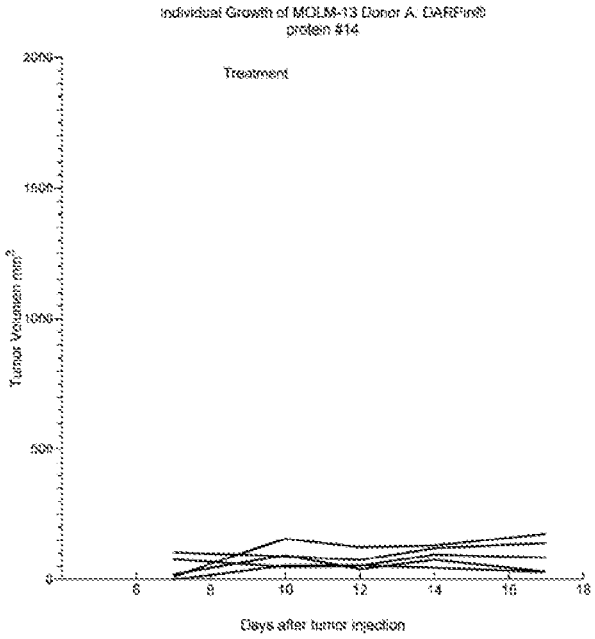


FIG. 43L

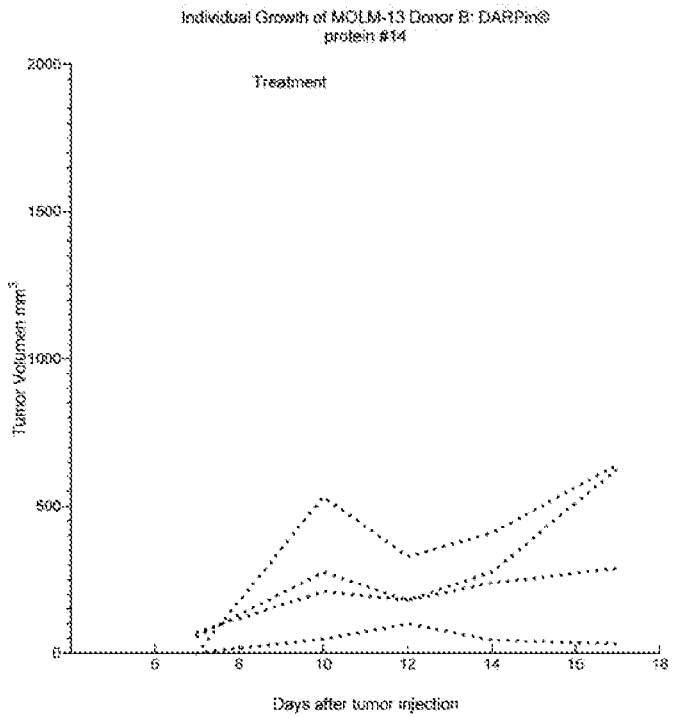


FIGURE 44 (A-H)

FIG.44A

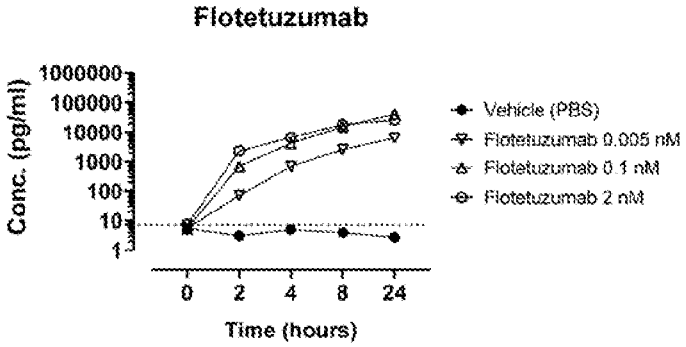


FIG.44B

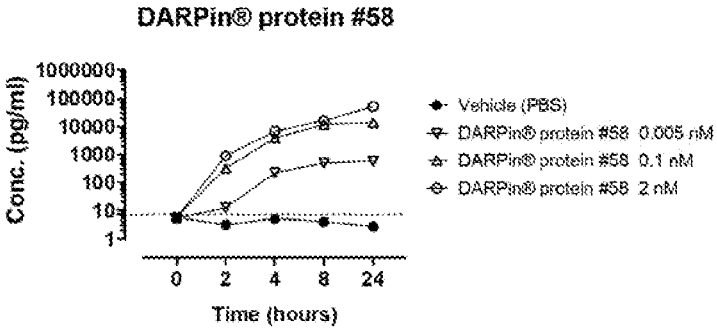


FIG.44C

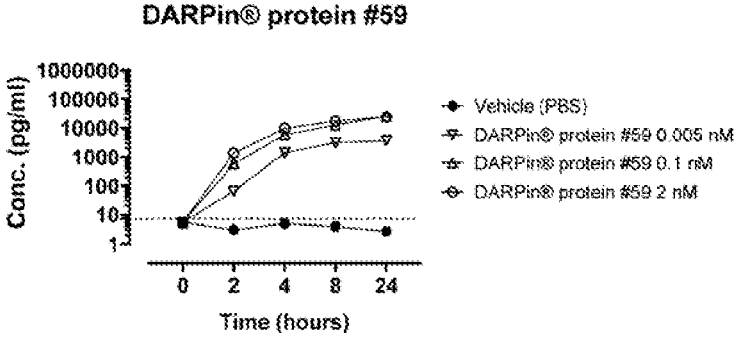


FIG.44D

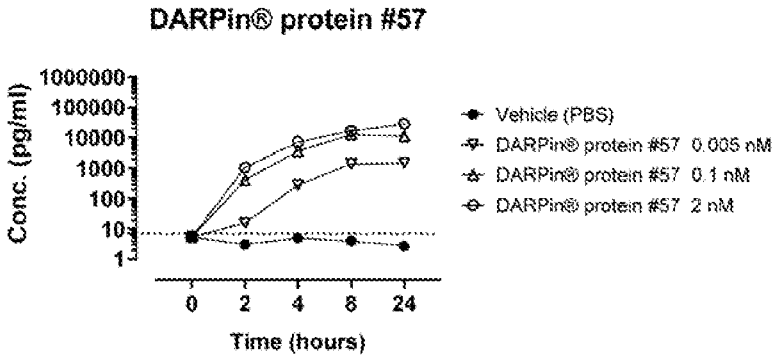


FIG.44E

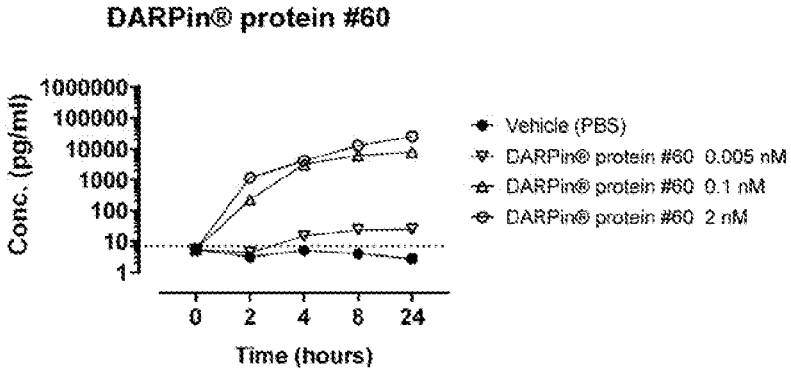


FIG.44F

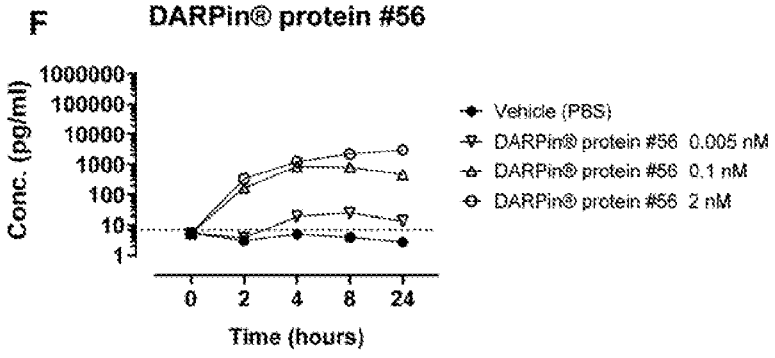


FIG.44G

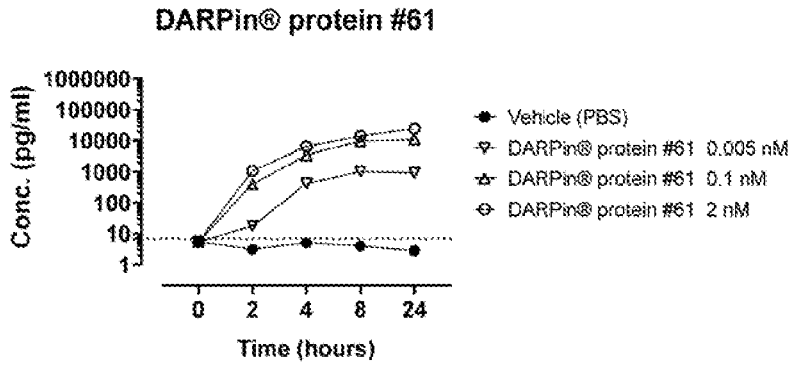


FIG.44H

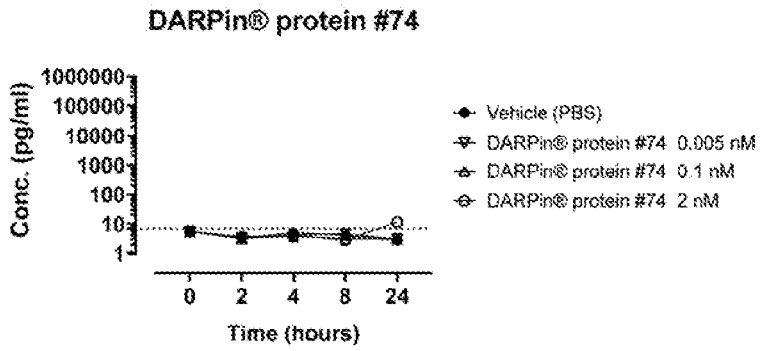


FIGURE 45 (A-H)

FIG.45A

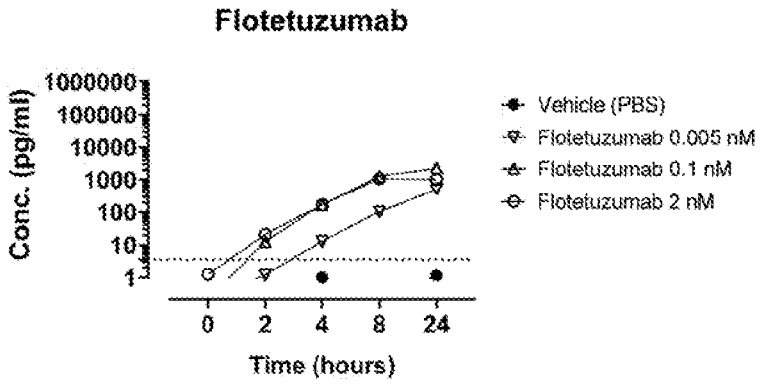


FIG.45B

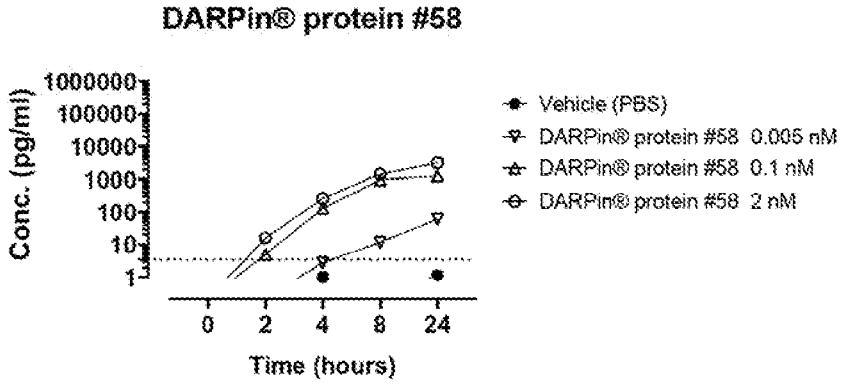


FIG.45C

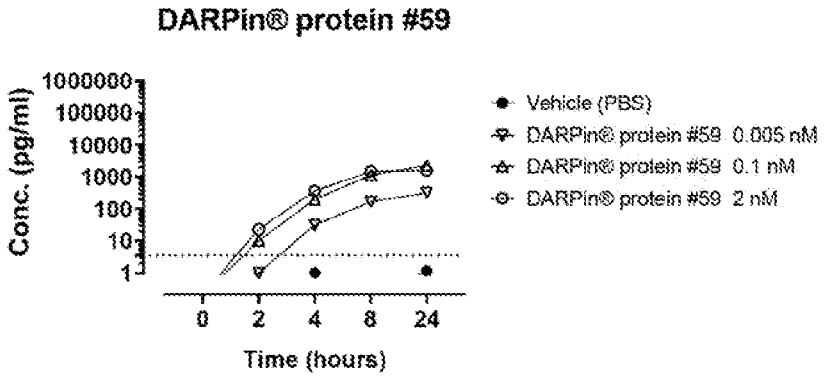


FIG.45D

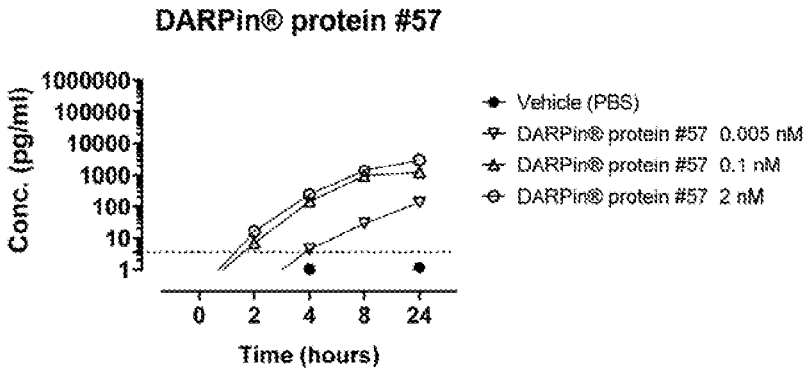


FIG.45E

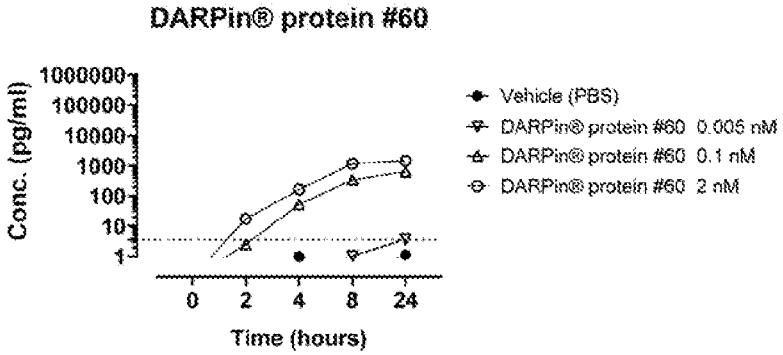


FIG.45F

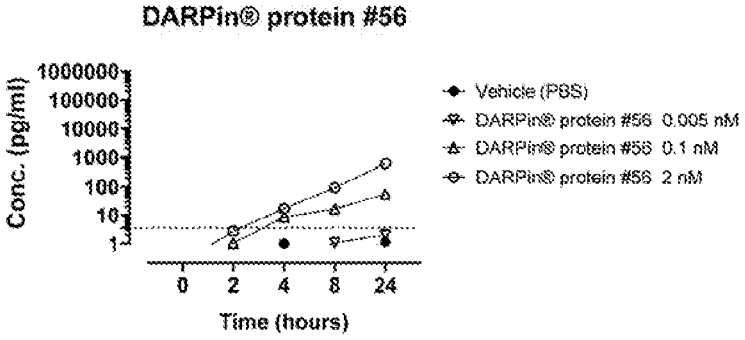


FIG.45G

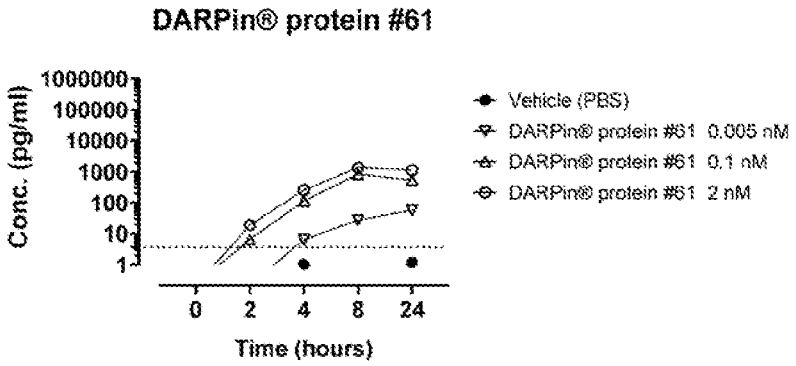


FIG.45H

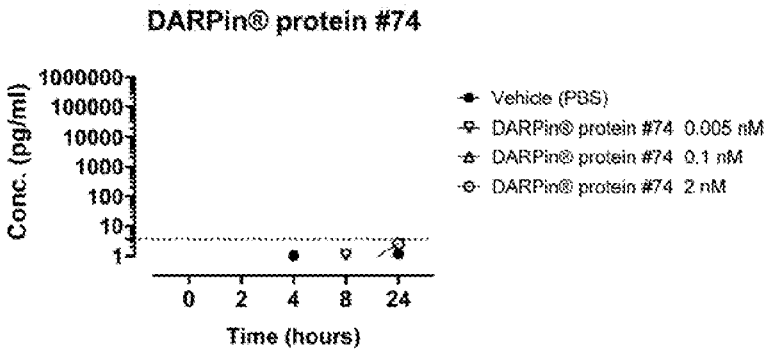


FIGURE 46 (A-H)

FIG.46A

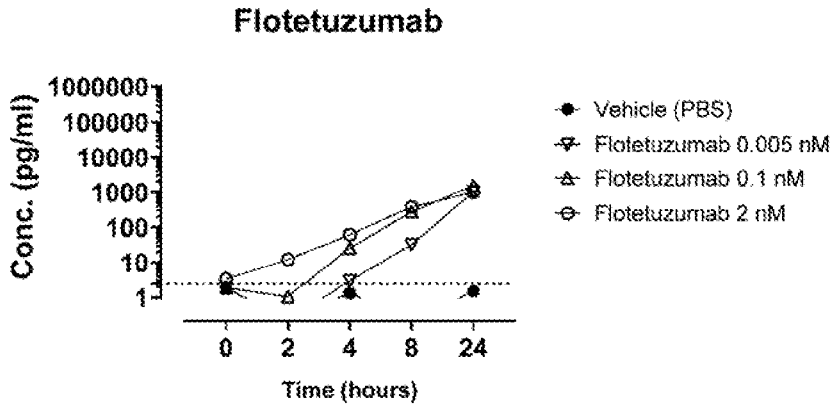


FIG.46B

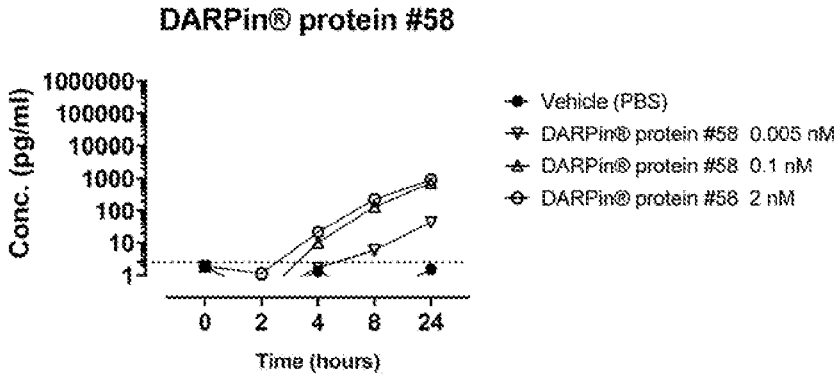


FIG.46C

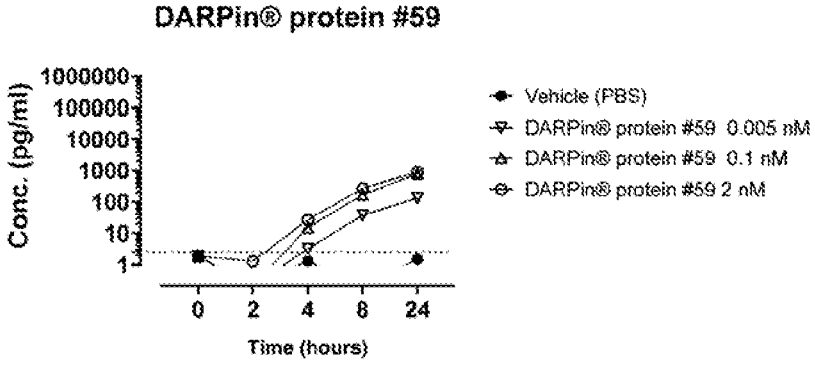


FIG.46D

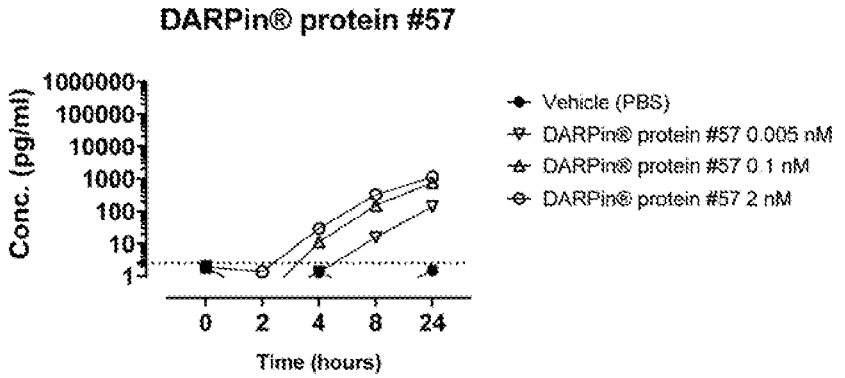


FIG.46E

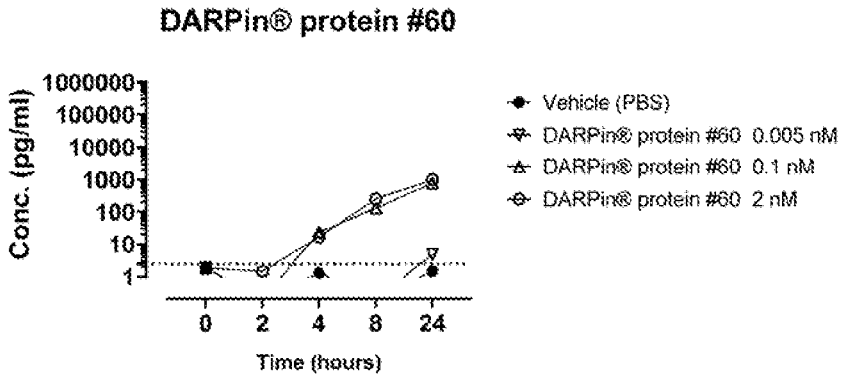


FIG.46F

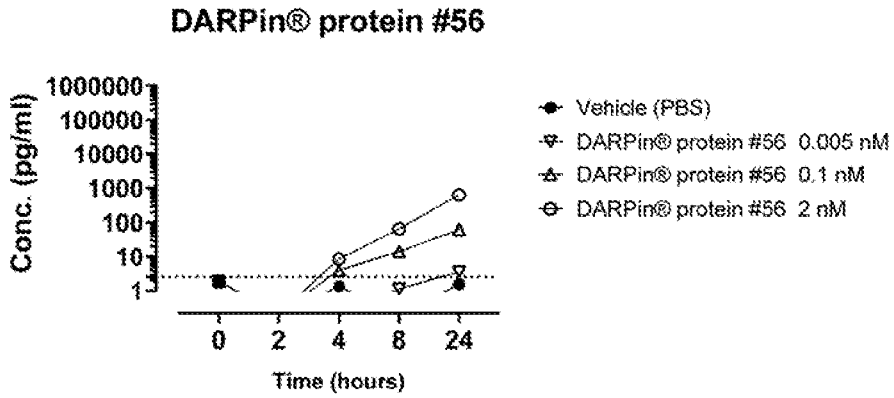


FIG.46G

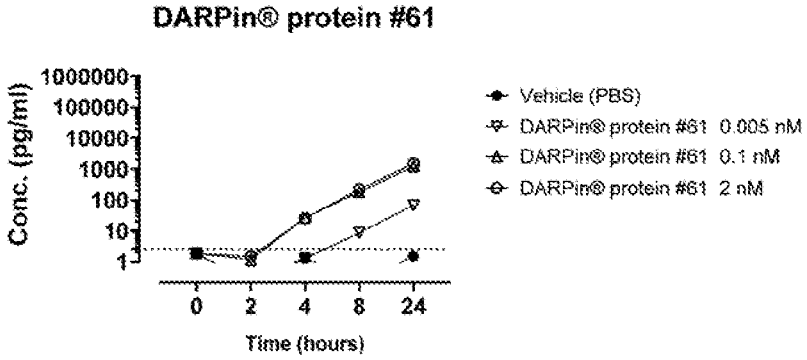


FIG.46H

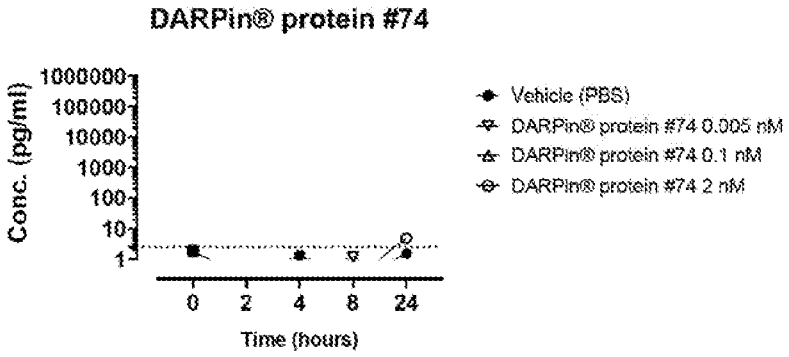


FIGURE 47 (A-H)

FIG.47A

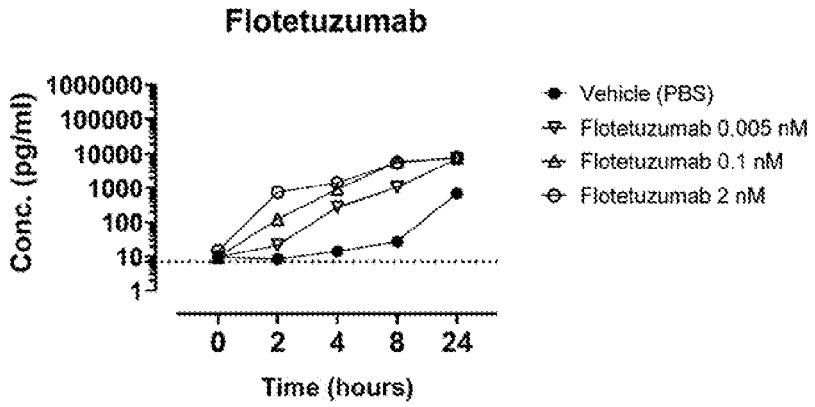


FIG.47B

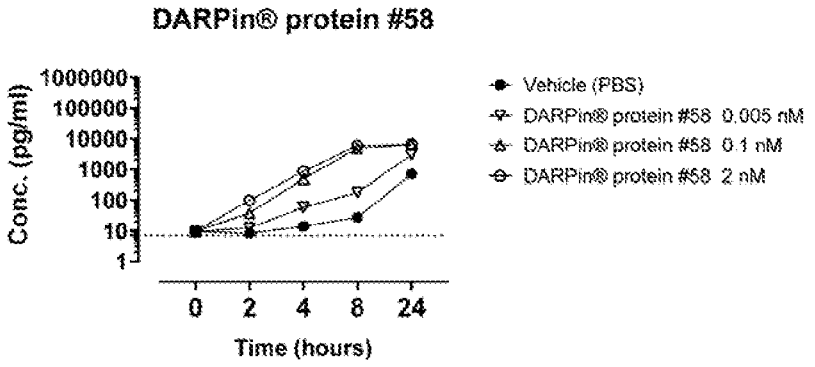


FIG.47C

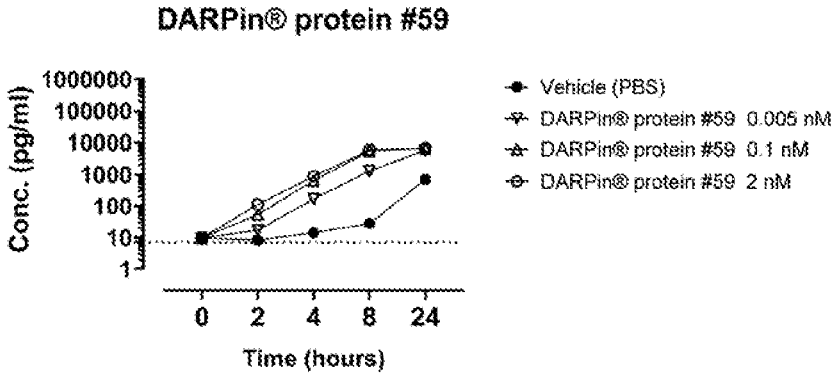


FIG.47D

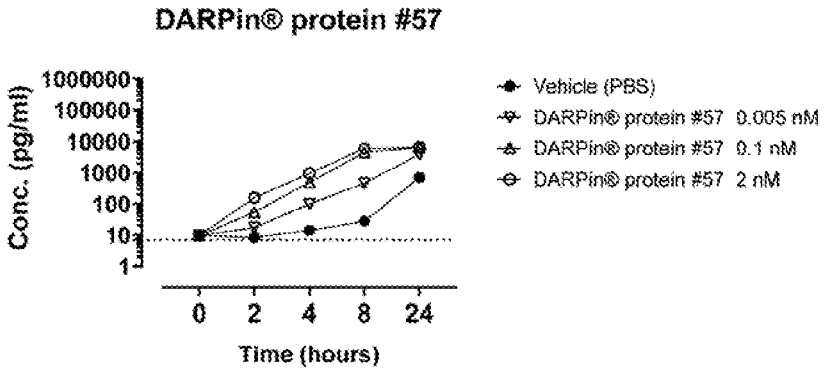


FIG.47E

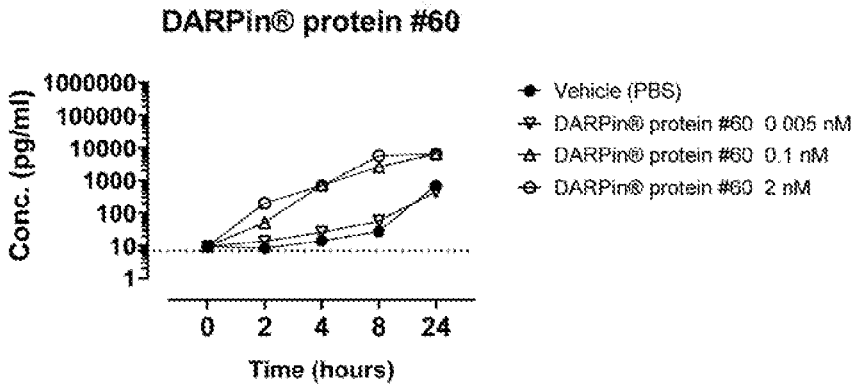


FIG.47F

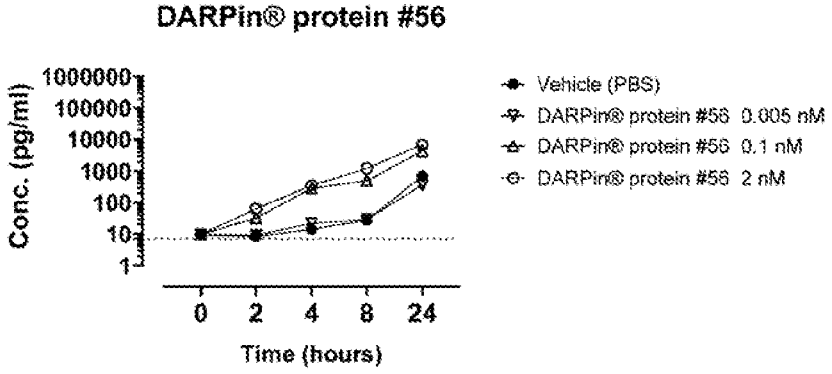


FIG.47G

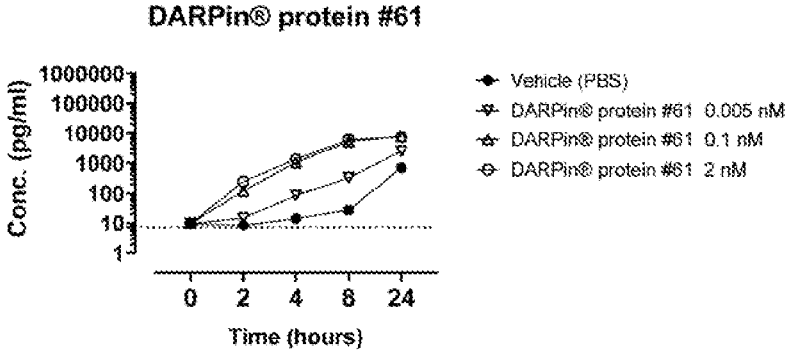


FIG.47H

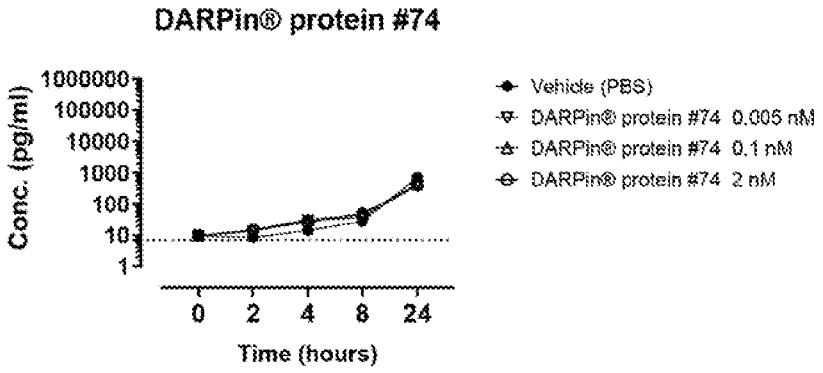


FIGURE 48 (A-H)

FIG. 48A

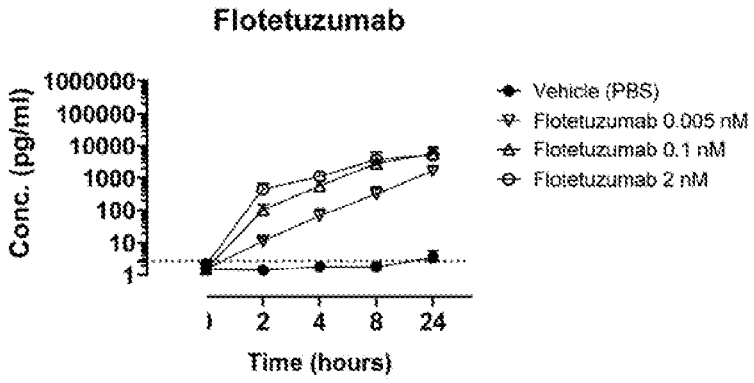


FIG.48B

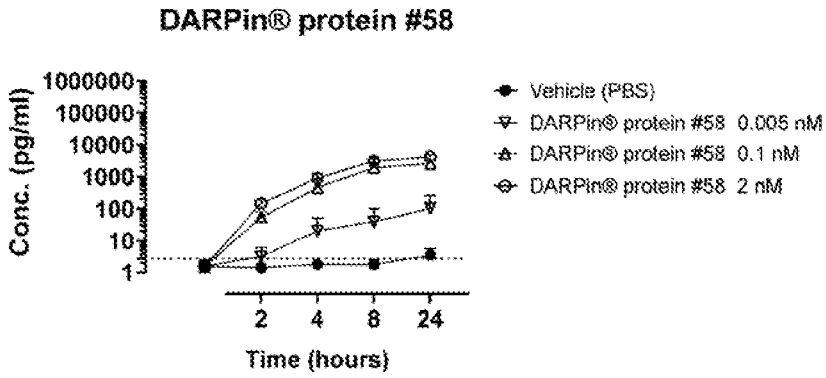


FIG.48C

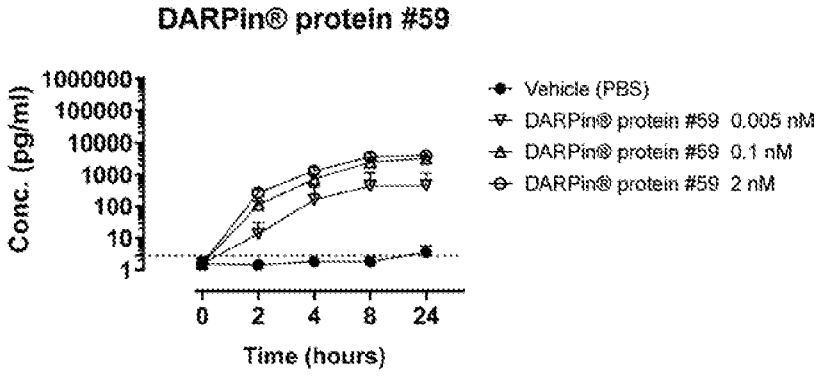


FIG.48D

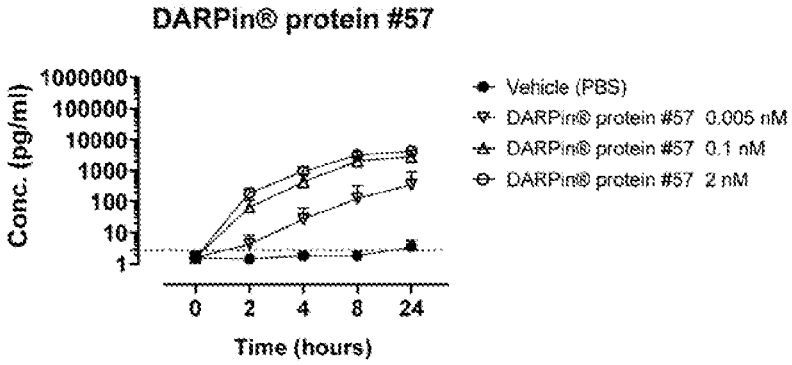


FIG. 48E

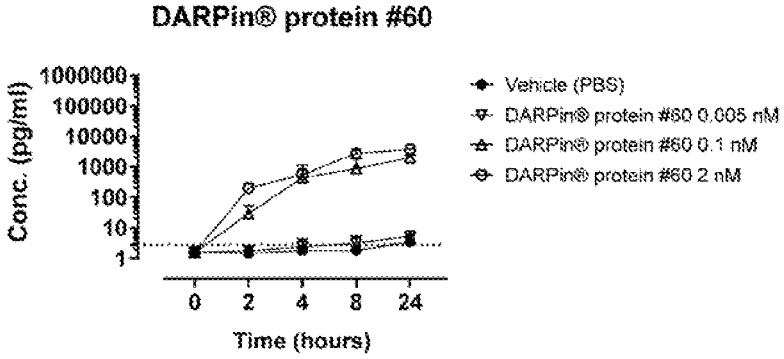


FIG.48F

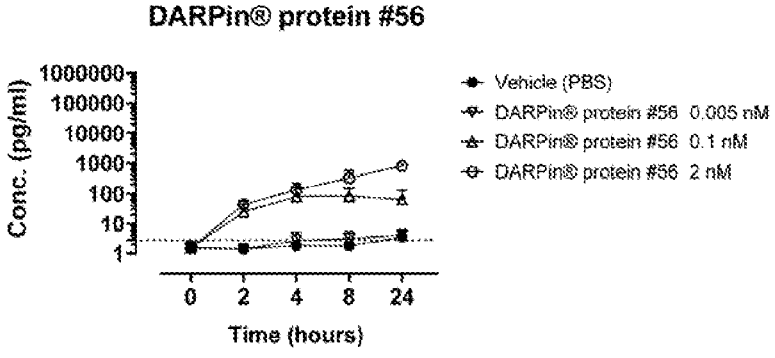


FIG.48G

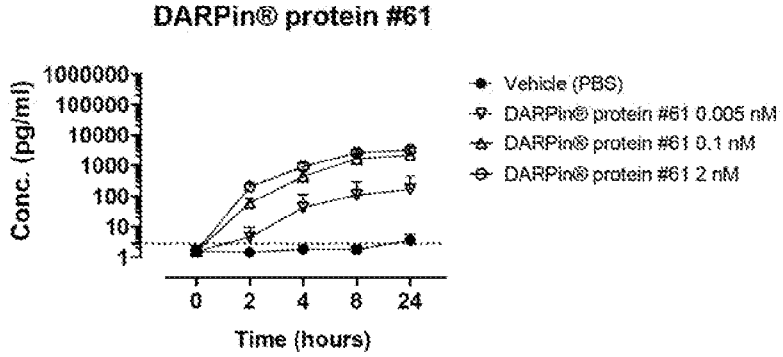


FIG.48H

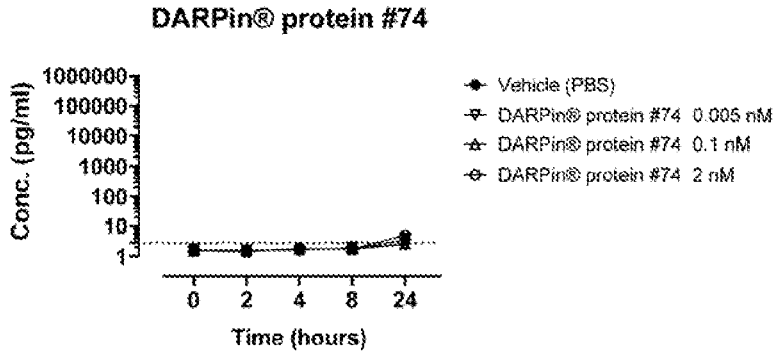


FIGURE 49 (A-H)

FIG.49A

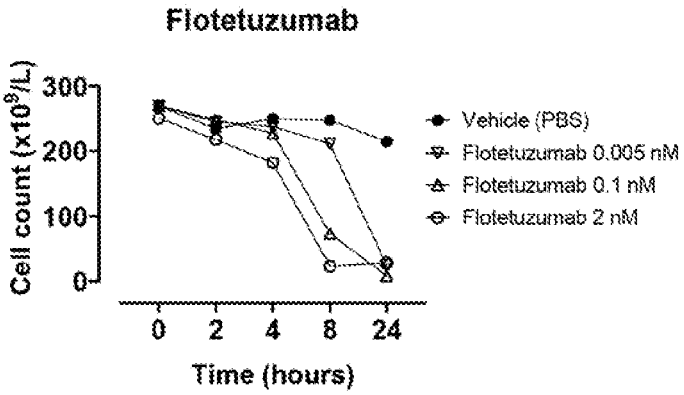


FIG.49B

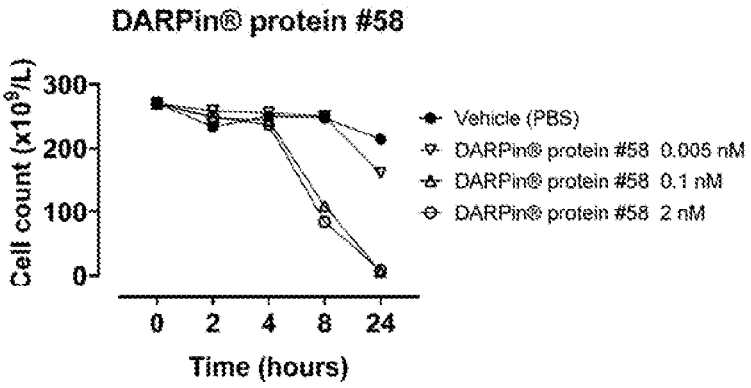


FIG.49C

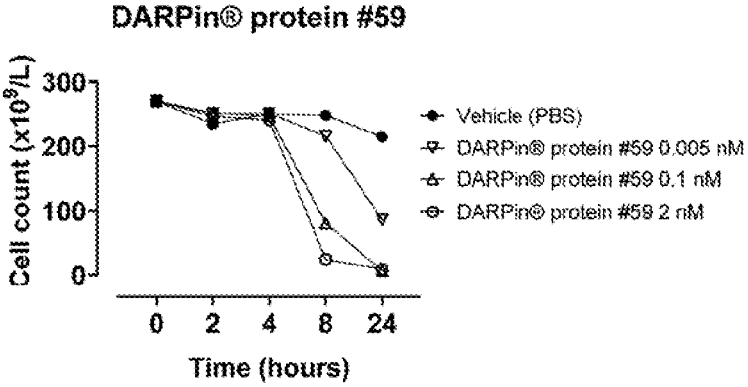


FIG.49D

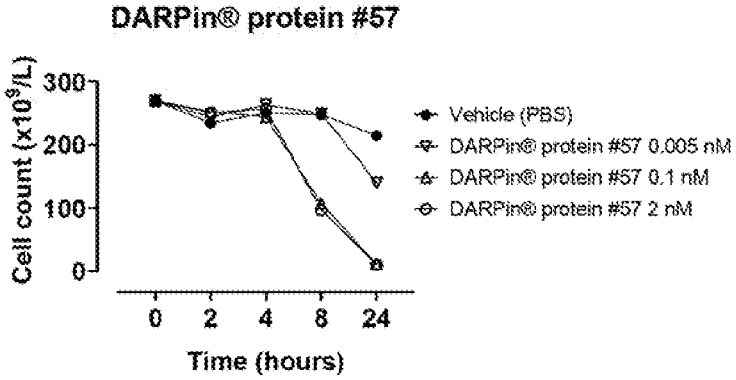


FIG.49E

