90.7% identity in 2556 residues overlap; Score: 13215.0; Gap frequency: 1.0%

```
Human       1 MPPLLAPLLCLALLPALAARGPRCSQPGETCLNGGKCEAANGTEACVCGGAFVGPRCQDP
Mouse       1 MPRLLTPLLCLTLLPALAARGLRCSQPSGTCLNGGRCEVASGTEACVCSGAFVGQRCQDS
              ** ** ***** ********* *****  ****** ** * ******* ***** ****
              Signal Peptide          EGF1

Human      61 NPCLSTPCKNAGTCHVVDRRGVADYACSCALGFSGPLCLTPLDNACLTNPCRNGGTCDLL
Mouse      61 NPCLSTPCKNAGTCHVVDHGGTVDYACSCPLGFSGPLCLTPLDNACLANPCRNGGTCDLL
              ******************  *  ****** ***************** ************
              EGF2                                  EGF3

Human     121 TLTEYKCRCPPGWSGKSCQQADPCASNPCANGGQCLPFEASYICHCPPSFHGPTCRQDVN
Mouse     121 TLTEYKCRCPPGWSGKSCQQADPCASNPCANGGQCLPFESSYICRCPPGFHGPTCRQDVN
              ************************************ **** *** ***********
                                      EGF4

Human     181 ECGQKPGLCRHGGTCHNEVGSYRCVCRATHTGPNCERPYVPCSPSPCQNGGTCRPTGDVT
Mouse     181 ECSQNPGLCRHGGTCHNEIGSYRCACRATHTGPHCELPYVPCSPSPCQNGGTCRPTGDTT
              ** * ************* ***** ******** ** ********************** *
              EGF5                                  EGF6

Human     241 HECACLPGFTGQNCEENIDDCPGNNCKNGGACVDGVNTYNCRCPPEWTGQYCTEDVDECQ
Mouse     241 HECACLPGFAGQNCEENVDDCPGNNCKNGGACVDGVNTYNCRCPPEWTGQYCTEDVDECQ
              ********* ******* ****************************************
                                      EGF7                          EGF8

Human     301 LMPNACQNGGTCHNTHGGYNCVCVNGWTGEDCSENIDDCASAACFHGATCHDRVASFYCE
Mouse     301 LMPNACQNGGTCHNTHGGYNCVCVNGWTGEDCSENIDDCASAACFQGATCHDRVASFYCE
              ************************************** **************
                                                EGF9

Human     361 CPHGRTGLLCHLNDACISNPCNEGSNCDTNPVNGKAICTCPSGYTGPACSQDVDECSLGA
Mouse     361 CPHGRTGLLCHLNDACISNPCNEGSNCDTNPVNGKAICTCPSGYTGPACSQDVDECALGA
              ************************************************** ***
                                EGF10                          EGF11

Human     421 NPCEHAGKCINTLGSFECQCLQGYTGPRCEIDVNECVSNPCQNDATCLDQIGEFQCICMP
Mouse     421 NPCEHAGKCLNTLGSFECQCLQGYTGPRCEIDVNECISNPCQNDATCLDQIGEFQCICMP
              ********* ************************* ************************
                                                EGF12

Human     481 GYEGVHCEVNTDECASSPCLHNGRCLDKINEFQCECPTGFTGHLCQYDVDECASTPCKNG
Mouse     481 GYEGVYCEINTDECASSPCLHNGHCMDKINEFQCQCPKGFNGHLCQYDVDECASTPCKNG
              ***** ** ************** * ******** ** ** ********************
                                EGF13                          EGF14

Human     541 AKCLDGPNTYTCVCTEGYTGTHCEVDIDECDPDPCHYGSCKDGVATFTCLCRPGYTGHHC
Mouse     541 AKCLDGPNTYTCVCTEGYTGTHCEVDIDECDPDPCHYGSCKDGVATFTCLCQPGYTGHHC
              ************************************************ ********
                                                EGF15

Human     601 ETNINECSSQPCRHGGTCQDRDNAYLCFCLKGTTGPNCEINLDDCASSPCDSGTCLDKID
Mouse     601 ETNINECHSQPCRHGGTCQDRDNSYLCLCLKGTTGPNCEINLDDCASNPCDSGTCLDKID
              ******* ************** *** ******************* ************
                EGF16                                   EGF17
```

FIG. 1A

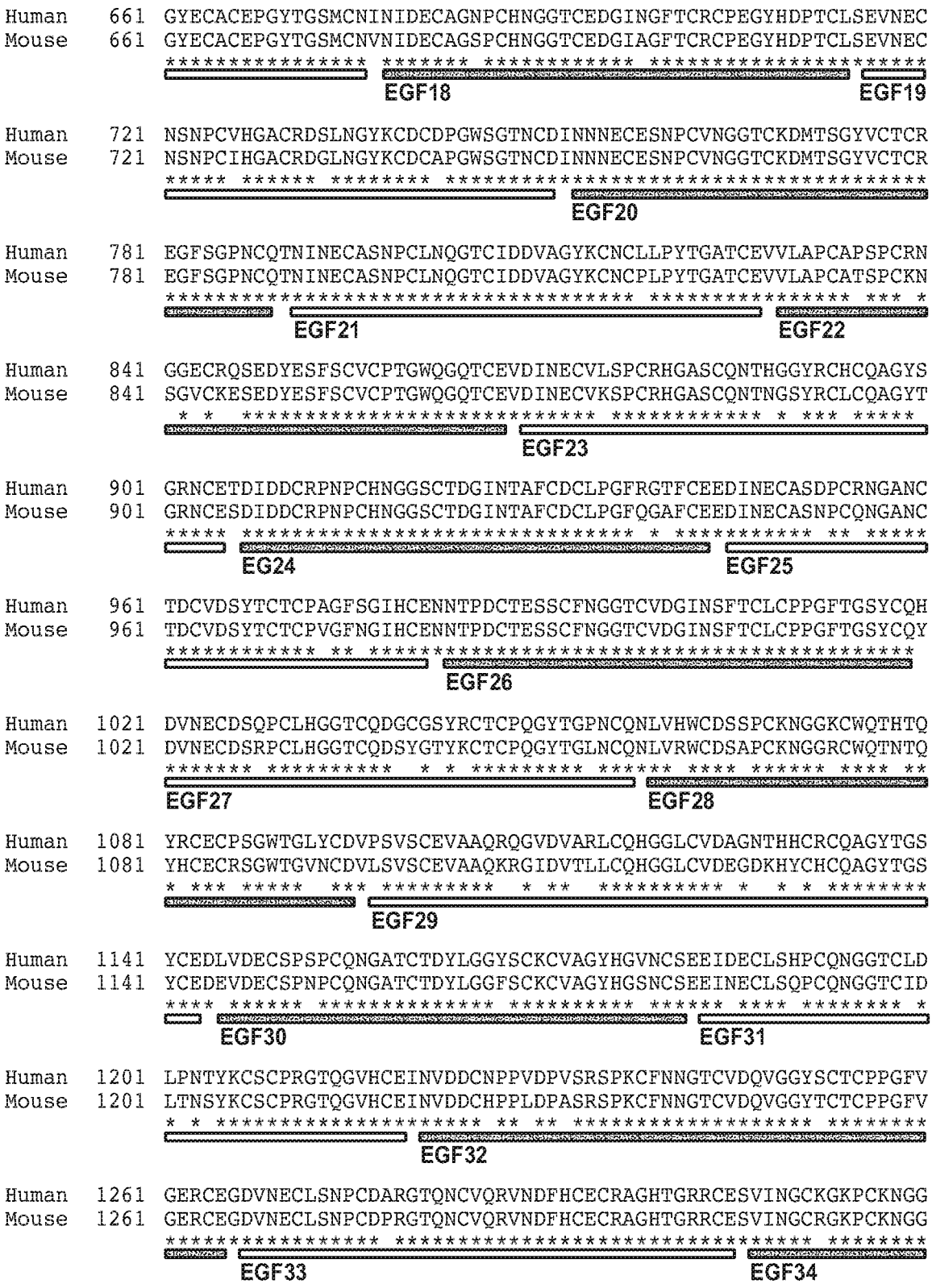

Human 661 GYECACEPGYTGSMCNINIDECAGNPCHNGGTCEDGINGFTCRCPEGYHDPTCLSEVNEC
Mouse 661 GYECACEPGYTGSMCNVNIDECAGSPCHNGGTCEDGIAGFTCRCPEGYHDPTCLSEVNEC
EGF18
EGF19
Human 721 NSNPCVHGACRDSLNGYKCDCDPGWSGTNCDINNNECESNPCVNGGTCKDMTSGYVCTCR
Mouse 721 NSNPCIHGACRDGLNGYKCDCAPGWSGTNCDINNNECESNPCVNGGTCKDMTSGYVCTCR
EGF20
Human 781 EGFSGPNCQTNINECASNPCLNQGTCIDDVAGYKCNCLLPYTGATCEVVLAPCAPSPCRN
Mouse 781 EGFSGPNCQTNINECASNPCLNQGTCIDDVAGYKCNCPLPYTGATCEVVLAPCATSPCKN
EGF21
EGF22
Human 841 GGECRQSEDYESFSCVCPTGWQGQTCEVDINECVLSPCRHGASCQNTHGGYRCHCQAGYS
Mouse 841 SGVCKESEDYESFSCVCPTGWQGQTCEVDINECVKSPCRHGASCQNTNGSYRCLCQAGYT
EGF23
Human 901 GRNCETDIDDCRPNPCHNGGSCTDGINTAFCDCLPGFRGTFCEEDINECASDPCRNGANC
Mouse 901 GRNCESDIDDCRPNPCHNGGSCTDGINTAFCDCLPGFQGAFCEEDINECASNPCQNGANC
EG24
EGF25
Human 961 TDCVDSYTCTCPAGFSGIHCENNTPDCTESSCFNGGTCVDGINSFTCLCPPGFTGSYCQH
Mouse 961 TDCVDSYTCTCPVGFNGIHCENNTPDCTESSCFNGGTCVDGINSFTCLCPPGFTGSYCQY
EGF26
Human 1021 DVNECDSQPCLHGGTCQDGCGSYRCTCPQGYTGPNCQNLVHWCDSSPCKNGGKCWQTHTQ
Mouse 1021 DVNECDSRPCLHGGTCQDSYGTYKCTCPQGYTGLNCQNLVRWCDSAPCKNGGRCWQTNTQ
EGF27
EGF28
Human 1081 YRCECPSGWTGLYCDVPSVSCEVAAQRQGVDVARLCQHGGLCVDAGNTHHCRCQAGYTGS
Mouse 1081 YHCECRSGWTGVNCDVLSVSCEVAAQKRGIDVTLLCQHGGLCVDEGDKHYCHCQAGYTGS
EGF29
Human 1141 YCEDLVDECSPSPCQNGATCTDYLGGYSCKCVAGYHGVNCSEEIDECLSHPCQNGGTCLD
Mouse 1141 YCEDEVDECSPNPCQNGATCTDYLGGFSCKCVAGYHGSNCSEEINECLSQPCQNGGTCID
EGF30
EGF31
Human 1201 LPNTYKCSCPRGTQGVHCEINVDDCNPPVDPVSRSPKCFNNGTCVDQVGGYSCTCPPGFV
Mouse 1201 LTNSYKCSCPRGTQGVHCEINVDDCHPPLDPASRSPKCFNNGTCVDQVGGYTCTCPPGFV
EGF32
Human 1261 GERCEGDVNECLSNPCDARGTQNCVQRVNDFHCECRAGHTGRRCESVINGCKGKPCKNGG
Mouse 1261 GERCEGDVNECLSNPCDPRGTQNCVQRVNDFHCECRAGHTGRRCESVINGCRGKPCKNGG
EGF33
EGF34

FIG. 1B

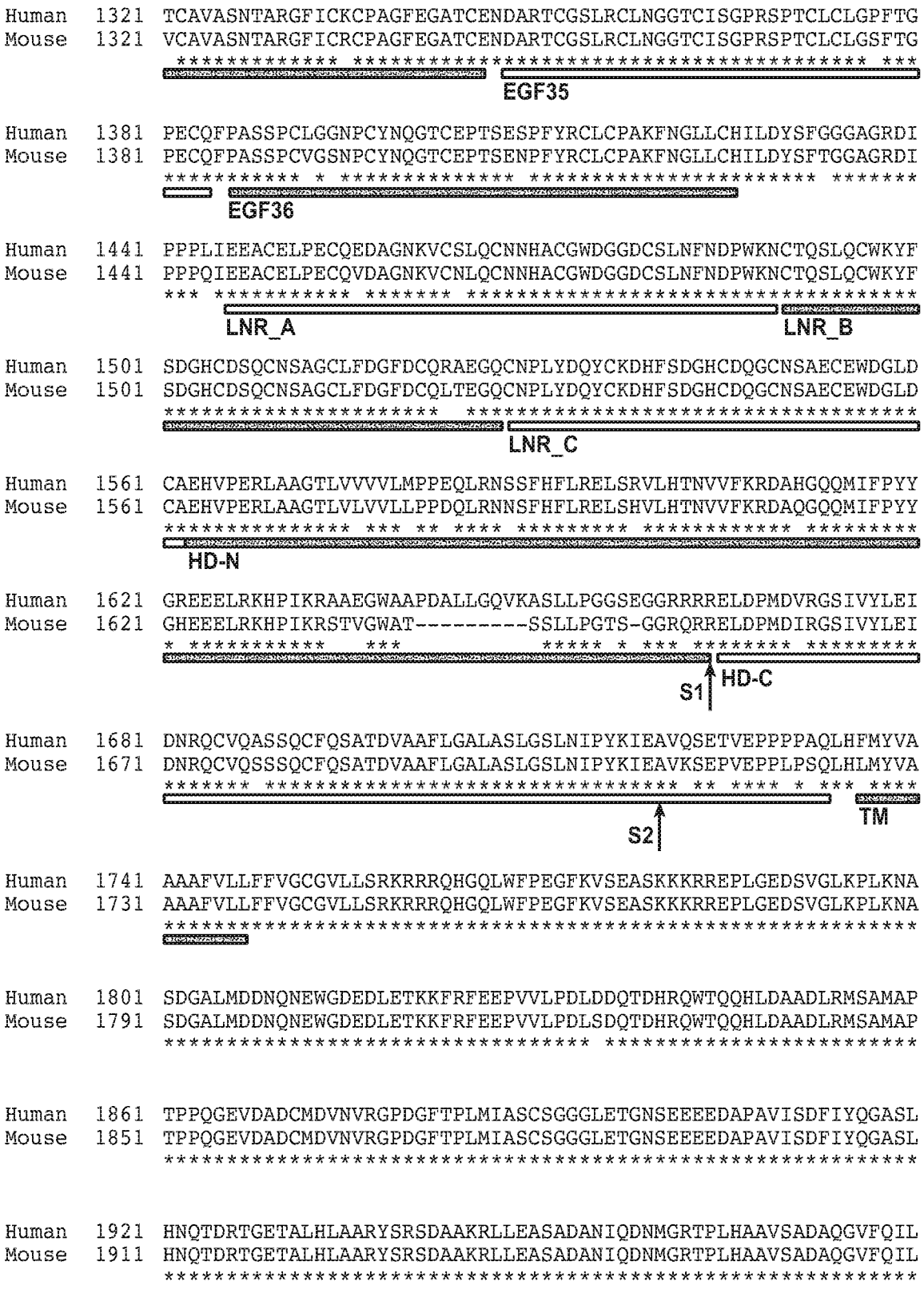

Human 1321 TCAVASNTARGFICKCPAGFEGATCENDARTCGSLRCLNGGTCISGPRSPTCLCLGPFTG
Mouse 1321 VCAVASNTARGFICRCPAGFEGATCENDARTCGSLRCLNGGTCISGPRSPTCLCLGSFTG
EGF35
Human 1381 PECQFPASSPCLGGNPCYNQGTCEPTSESPFYRCLCPAKFNGLLCHILDYSFGGGAGRDI
Mouse 1381 PECQFPASSPCVGSNPCYNQGTCEPTSENPFYRCLCPAKFNGLLCHILDYSFTGGAGRDI
EGF36
Human 1441 PPPLIEEACELPECQEDAGNKVCSLQCNNHACGWDGGDCSLNFNDPWKNCTQSLQCWKYF
Mouse 1441 PPPQIEEACELPECQVDAGNKVCNLQCNNHACGWDGGDCSLNFNDPWKNCTQSLQCWKYF
LNR_A
LNR_B
Human 1501 SDGHCDSQCNSAGCLFDGFDCQRAEGQCNPLYDQYCKDHFSDGHCDQGCNSAECEWDGLD
Mouse 1501 SDGHCDSQCNSAGCLFDGFDCQLTEGQCNPLYDQYCKDHFSDGHCDQGCNSAECEWDGLD
LNR_C
Human 1561 CAEHVPERLAAGTLVVVVLMPPEQLRNSSFHFLRELSRVLHTNVVFKRDAHGQQMIFPYY
Mouse 1561 CAEHVPERLAAGTLVLVVLLPPDQLRNNSFHFLRELSHVLHTNVVFKRDAQGQQMIFPYY
HD-N
Human 1621 GREEELRKHPIKRAAEGWAAPDALLGQVKASLLPGGSEGGRRRRELDPMDVRGSIVYLEI
Mouse 1621 GHEEELRKHPIKRSTVGWAT---------SSLLPGTS-GGRQRRELDPMDIRGSIVYLEI
S1
HD-C
Human 1681 DNRQCVQASSQCFQSATDVAAFLGALASLGSLNIPYKIEAVQSETVEPPPPAQLHFMYVA
Mouse 1671 DNRQCVQSSSQCFQSATDVAAFLGALASLGSLNIPYKIEAVKSEPVEPPLPSQLHLMYVA
S2
TM
Human 1741 AAAFVLLFFVGCGVLLSRKRRRQHGQLWFPEGFKVSEASKKKRREPLGEDSVGLKPLKNA
Mouse 1731 AAAFVLLFFVGCGVLLSRKRRRQHGQLWFPEGFKVSEASKKKRREPLGEDSVGLKPLKNA
Human 1801 SDGALMDDNQNEWGDEDLETKKFRFEEPVVLPDLDDQTDHRQWTQQHLDAADLRMSAMAP
Mouse 1791 SDGALMDDNQNEWGDEDLETKKFRFEEPVVLPDLSDQTDHRQWTQQHLDAADLRMSAMAP
Human 1861 TPPQGEVDADCMDVNVRGPDGFTPLMIASCSGGGLETGNSEEEEDAPAVISDFIYQGASL
Mouse 1851 TPPQGEVDADCMDVNVRGPDGFTPLMIASCSGGGLETGNSEEEEDAPAVISDFIYQGASL
Human 1921 HNQTDRTGETALHLAARYSRSDAAKRLLEASADANIQDNMGRTPLHAAVSADAQGVFQIL
Mouse 1911 HNQTDRTGETALHLAARYSRSDAAKRLLEASADANIQDNMGRTPLHAAVSADAQGVFQIL

FIG. 1C

```
Human   1981  IRNRATDLDARMHDGTTPLILAARLAVEGMLEDLINSHADVNAVDDLGKSALHWAAAVNN
Mouse   1971  LRNRATDLDARMHDGTTPLILAARLAVEGMLEDLINSHADVNAVDDLGKSALHWAAAVNN
              ************************************************************


Human   2041  VDAAVVLLKNGANKDMQNNREETPLFLAAREGSYETAKVLLDHFANRDITDHMDRLPRDI
Mouse   2031  VDAAVVLLKNGANKDMQNNKEETPLFLAAREGSYETAKVLLDHFANRDITDHMDRLPRDI
              ******************* ****************************************


Human   2101  AQERMHHDIVRLLDEYNLVRSPQLHGAPLGGTPTLSPPLCSPNGYLGSLKPGVQGKKVRK
Mouse   2091  AQERMHHDIVRLLDEYNLVRSPQLHGTALGGTPTLSPTLCSPNGYLGNLKSATQGKKARK
              *************************  ********* ********* **   **** **


Human   2161  PSSKGLACGSKEAKDLKARRKKSQDGKGCLLDSSGMLSPVDSLESPHGYLSDVASPPLLP
Mouse   2151  PSTKGLACGSKEAKDLKARRKKSQDGKGCLLDSSSMLSPVDSLESPHGYLSDVASPPLLP
              ** ******************************** ************************


Human   2221  SPFQQSPSVPLNHLPGMPDTHLGIGHLNVAAKPEMAALGGGGRLAFETGPPRLSHLPVAS
Mouse   2211  SPFQQSPSMPLSHLPGMPDTHLGISHLNVAAKPEMAALAGGSRLAFEPPPPRLSHLPVAS
              ******** ** ************ ************* ** *****  ***********


Human   2281  GTSTVLGSSSGGALNFTVGGSTSLNGQCEWLSRLQSGMVPNQYNPLRGSVAPGPLSTQAP
Mouse   2271  SASTVLSTNGTGAMNFTVGAPASLNGQCEWLPRLQNGMVPSQYNPLRPGVTPGTLSTQAA
                ****     ** *****   ********* *** **** ******  * ** *****


Human   2341  SLQHGMVGPLHSSLAASALSQMMSYQGLPSTRLATQPHLVQTQQVQPQNLQMQQQNLQPA
Mouse   2331  GLQHSMMGPLHSSLSTNTLSPII-YQGLPNTRLATQPHLVQTQQVQPQNLQLQPQNLQP-
               *** * *******    **    ***** ********************* * *****


Human   2401  NIQQQQSLQPPPPPPQPHLGVSSAASGHLGRSFLSGEPSQADVQPLGPSSLAVHTILPQE
Mouse   2389  --------------PSQPHLSVSSAANGHLGRSFLSGEPSQADVQPLGPSSLPVHTILPQE
                          * **** ***** ************************* ********


Human   2461  SPALPTSLPSSLVPPVTAAQFLTPPSQHSYSS-PVDNTPSHQLQVPEHPFLTPSPESPDQ
Mouse   2436  SQALPTSLPSSMVPPMTTTQFLTPPSQHSYSSSPVDNTPSHQLQVPEHPFLTPSPESPDQ
              * ********* *** *  ************* ***************************


Human   2520  WSSSSPHSNVSDWSEGVSSPPTSMQSQIARIPEAFK
Mouse   2496  WSSSSPHSNISDWSEGISSPPTTMPSQITHIPEAFK
              ********* ****** ***** * ***  ******
```

FIG. 1D

Amino Acid Sequence of Human Notch 3 (NP_000426)

1 MGPGARGRRR RRRPMSPPPP PPPVRALPLL LLLAGPGAAA PPCLDGSPCA NGGRCTQLPS
61 REAACLCPPG WVGERCQLED PCHSGPCAGR GVCQSSVVAG TARFSCRCPR GFRGPDCSLP
121 DPCLSSPCAH GARCSVGPDG RFLCSCPPGY QGRSCRSDVD ECRVGEPCRH GGTCLNTPGS
181 FRCQCPAGYT GPLCENPAVP CAPSPCRNGG TCRQSGDLTY DCACLPGFEG QNCEVNVDDC
241 PGHRCLNGGT CVDGVNTYNC QCPPEWTGQF CTEDVDECQL QPNACHNGGT CFNTLGGHSC
301 VCVNGWTGES CSQNIDDCAT AVCFHGATCH DRVASFYCAC PMGKTGLLCH LDDACVSNPC
361 HEDAICDTNP VNGRAICTCP PGFTGGACDQ DVDECSIGAN PCEHLGRCVN TQGSFLCQCG
421 RGYTGPRCET DVNECLSGPC RNQATCLDRI GQFTCICMAG FTGTYCEVDI DECQSSPCVN
481 GGVCKDRVNG FSCTCPSGFS GSTCQLDVDE CASTPCRNGA KCVDQPDGYE CRCAEGFEGT
541 LCDRNVDDCS PDPCHHGRCV DGIASFSCAC APGYTGTRCE SQVDECRSQP CRHGGKCLDL
601 VDKYLCRCPS GTTGVNCEVN IDDCASNPCT FGVCRDGINR YDCVCQPGFT GPLCNVEINE
661 CASSPCGEGG SCVDGENGFR CLCPPGSLPP LCLPPSHPCA HEPCSHGICY DAPGGFRCVC
721 EPGWSGPRCS QSLARDACES QPCRAGGTCS SDGMGFHCTC PPGVQGRQCE LLSPCTPNPC
781 EHGGRCESAP GQLPVCSCPQ GWQGPRCQQD VDECAGPAPC GPHGICTNLA GSFSCTCHGG
841 YTGPSCDQDI NDCDPNPCLN GGSCQDGVGS FSCSCLPGFA GPRCARDVDE CLSNPCGPGT
901 CTDHVASFTC TCPPGYGGFH CEQDLPDCSP SSCFNGGTCV DGVNSFSCLC RPGYTGAHCQ
961 HEADPCLSRP CLHGGVCSAA HPGFRCTCLE SFTGPQCQTL VDWCSRQPCQ NGGRCVQTGA
1021 YCLCPPGWSG RLCDIRSLPC REAAAQIGVR LEQLCQAGGQ CVDEDSSHYC VCPEGRTGSH
1081 CEQEVDPCLA QPCQHGGTCR GYMGGYMCEC LPGYNGDNCE DDVDECASQP CQHGGSCIDL
1141 VARYLCSCPP GTLGVLCEIN EDDCGPGPPL DSGPRCLHNG TCVDLVGGFR CTCPPGYTGL
1201 RCEADINECR SGACHAAHTR DCLQDPGGGF RCLCHAGFSG PRCQTVLSPC ESQPCQHGGQ
1261 CRPSPGPGGG LTFTCHCAQP FWGPRCERVA RSCRELQCPV GVPCQQTPRG PRCACPPGLS
1321 GPSCRSFPGS PPGASNASCA AAPCLHGGSC RPAPLAPFFR CACAQGWTGP RCEAPAAAPE
1381 VSE***EPRCPRA ACQAKRGDQR CDRECNSPGC GWDGGDCSLS VGDPWRQCEA LQCWRLFNNS***
1441 RCDPACSSPA CLYDNFDCHA GGRERTCNPV YEKYCADHFA DGRCDQGCNT EECGWDGLDC
1501 ASEVPALLAR GVLVLTVLLP PEELLRSSAD FLQRLSAILR TSLRFRLDAH GQAMVFPYHR
1561 PSPGSEPRAR RELAPEVIGS VVMLEIDNRL CLQSPENDHC FPDAQSAADY LGALSAVERL
1621 DFPYPLRDVR GEPLEPPEPS VPLLPLLVAG AVLLLVILVL GVMVARRKRE HSTLWFPEGF
1681 SLHKDVASGH KGRREPVGQD ALGMKNMAKG ESLMGEVATD WMDTECPEAK RLKVEEPGMG
1741 AEEAVDCRQW TQHHLVAADI RVAPAMALTP PQGDADADGM DVNVRGPDGF TPLMLASFCG
1801 GALEPMPTEE DEADDTSASI ISDLICQGAQ LGARTDRTGE TALHLAARYA RADAAKRLLD
1861 AGADTNAQDH SGRTPLHTAV TADAQGVFQI LIRNRSTDLD ARMADGSTAL ILAARLAVEG
1921 MVEELIASHA DVNAVDELGK SALHWAAAVN NVEATLALLK NGANKDMQDS KEETPLFLAA
1981 REGSYEAAKL LLDHFANREI TDHLDRLPRD VAQERLHQDI VRLLDQPSGP RSPPGPHGLG
2041 PLLCPPGAFL PGLKAAQSGS KKSRRPPGKA GLGPQGPRGR GKKLTLACPG PLADSSVTLS
2101 PVDSLDSPRP FGGPPASPGG FPLEGPYAAA TATAVSLAQL GGPGRAGLGR QPPGGCVLSL
2161 GLLNPVAVPL DWARLPPPAP PGPSFLLPLA PGPQLLNPGT PVSPQERPPP YLAVPGHGEE
2221 YPVAGAHSSP PKARFLRVPS EHPYLTPSPE SPEHWASPSP PSLSDWSEST PSPATATGAM
2281 ATTTGALPAQ PLPLSVPSSL AQAQTQLGPQ PEVTPKRQVL A (SEQ ID NO 3)

FIG. 2

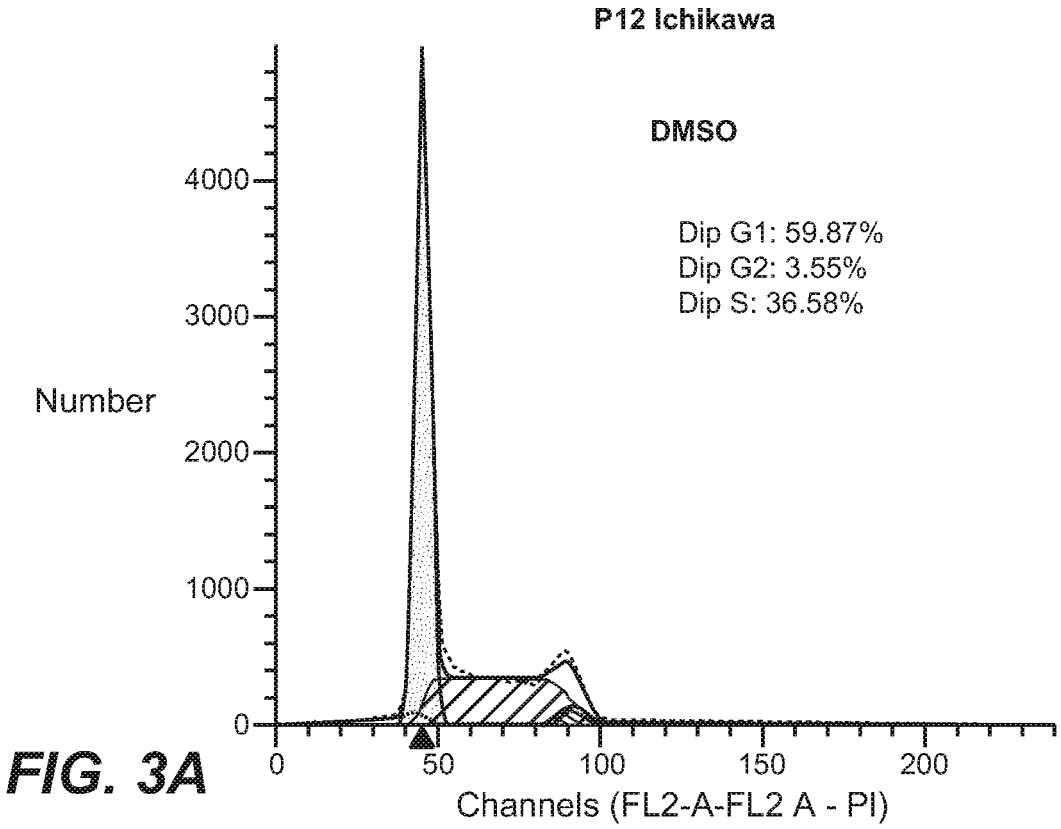

P12 Ichikawa
DMSO
Dip G1: 59.87%
Dip G2: 3.55%
Dip S: 36.58%
Number
4000
3000
2000
1000
0
0
50
100
150
200
Channels (FL2-A-FL2 A - PI)

FIG. 3A

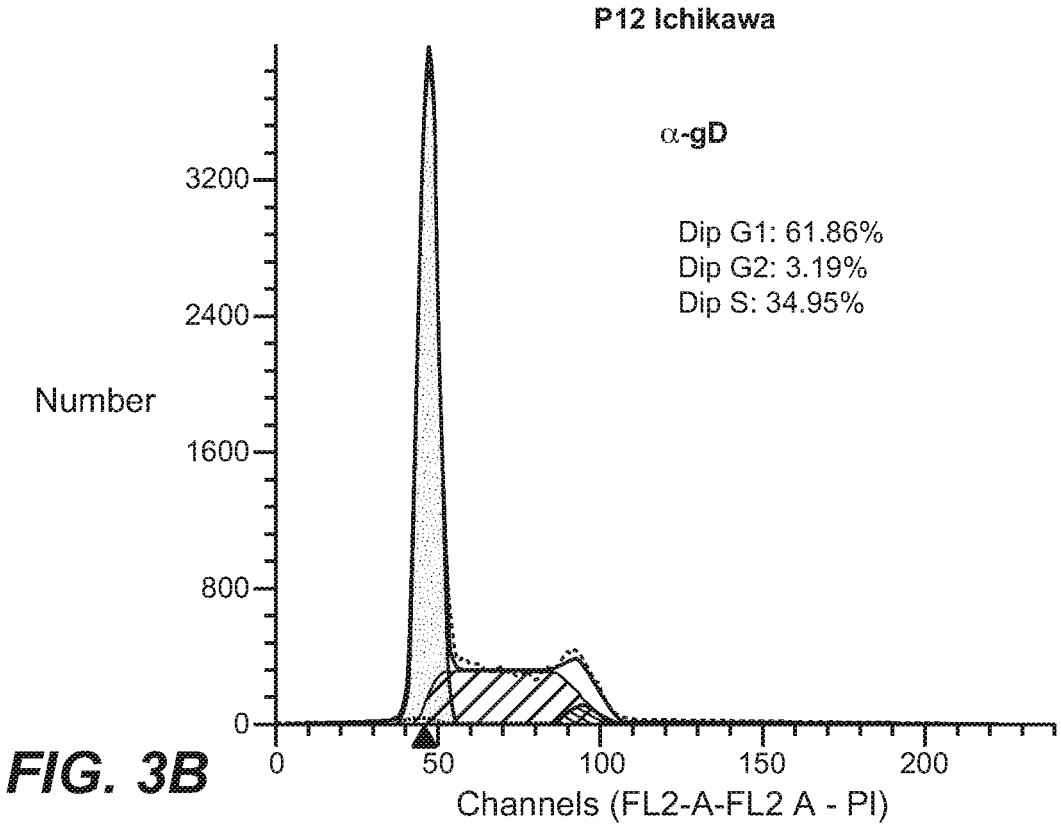

P12 Ichikawa
α-gD
Dip G1: 61.86%
Dip G2: 3.19%
Dip S: 34.95%
Number
3200
2400
1600
800
0
0
50
100
150
200
Channels (FL2-A-FL2 A - PI)

FIG. 3B

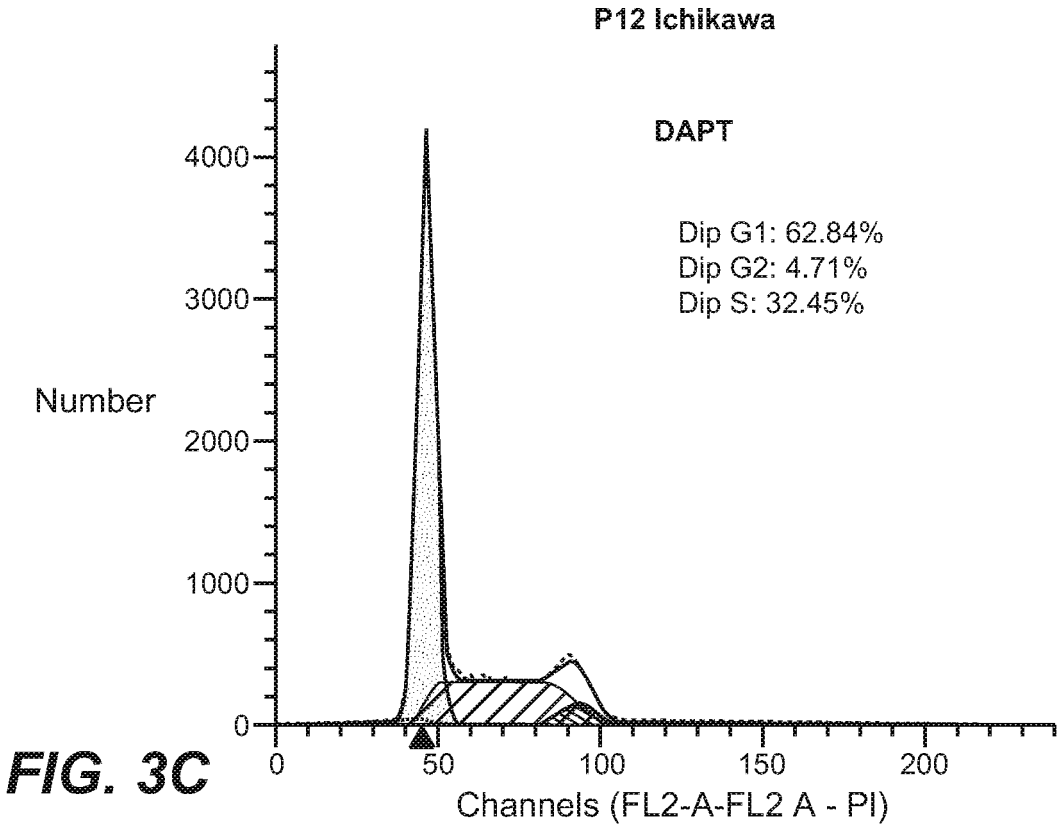

P12 Ichikawa
DAPT
Dip G1: 62.84%
Dip G2: 4.71%
Dip S: 32.45%
Number
4000
3000
2000
1000
0
0
50
100
150
200
Channels (FL2-A-FL2 A - PI)

FIG. 3C

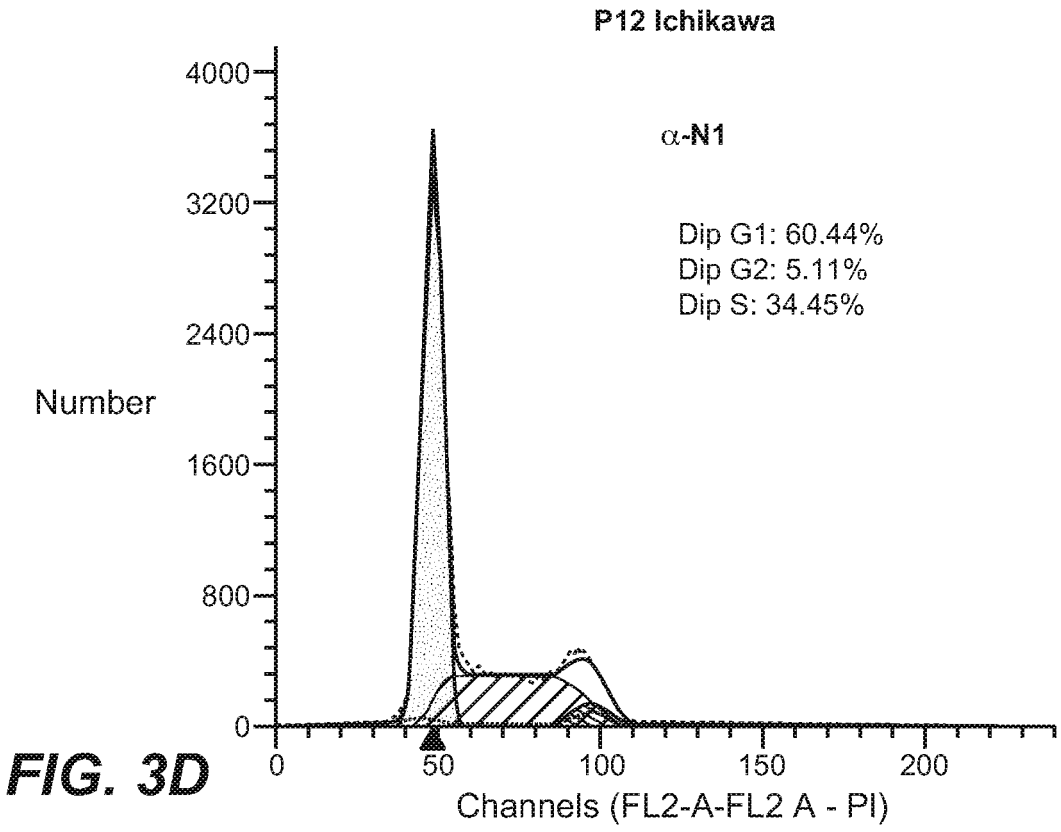

P12 Ichikawa
α-N1
Dip G1: 60.44%
Dip G2: 5.11%
Dip S: 34.45%
Number
4000
3200
2400
1600
800
0
0
50
100
150
200
Channels (FL2-A-FL2 A - PI)

FIG. 3D

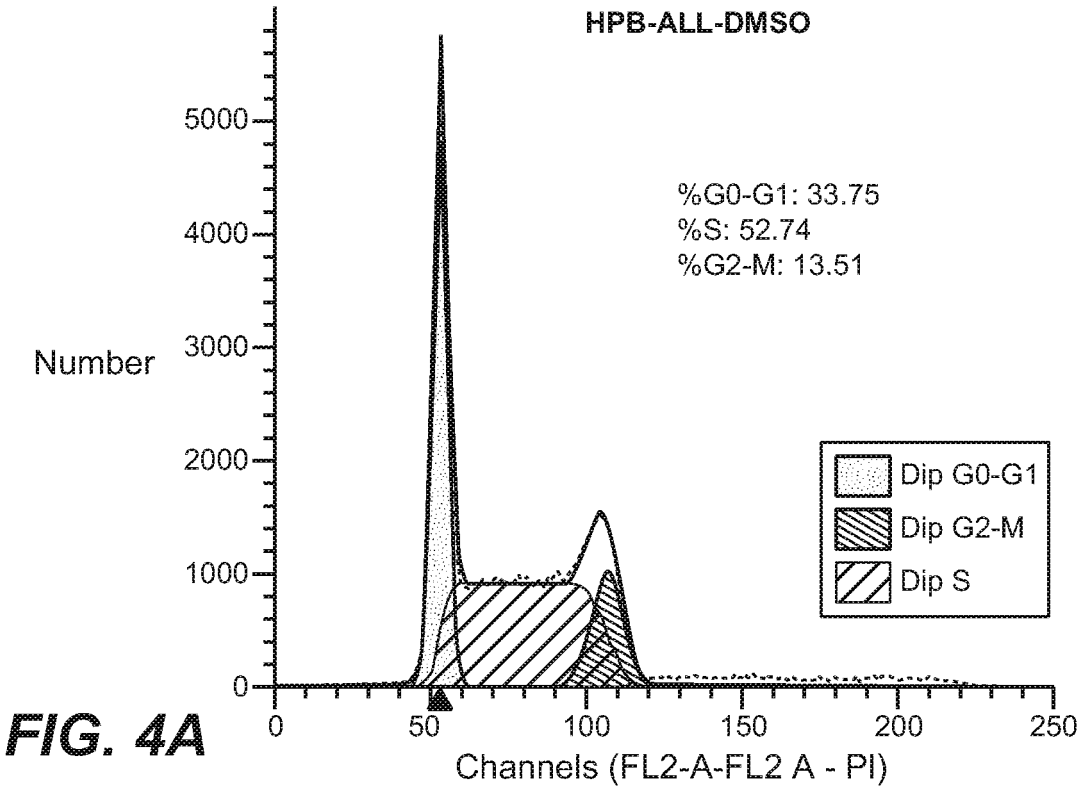

HPB-ALL-DMSO
%G0-G1: 33.75
%S: 52.74
%G2-M: 13.51
Number
5000
4000
3000
2000
1000
0
Dip G0-G1
Dip G2-M
Dip S
0
50
100
150
200
250
Channels (FL2-A-FL2 A - PI)

FIG. 4A

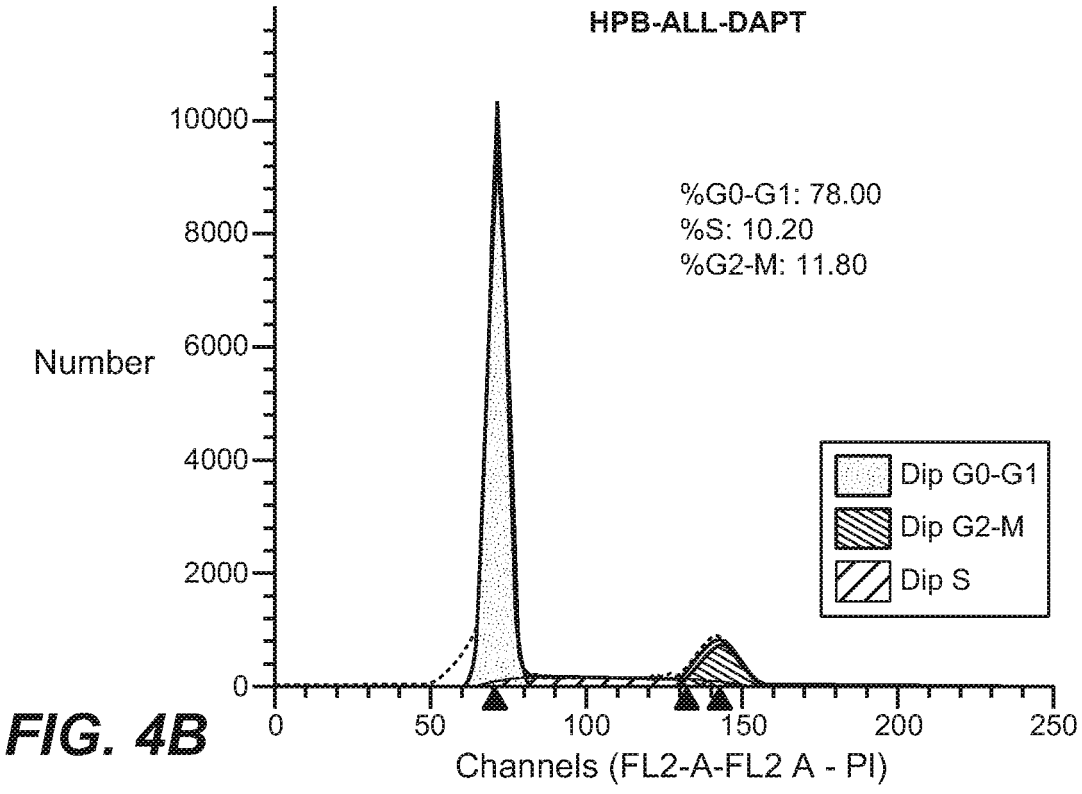

HPB-ALL-DAPT
%G0-G1: 78.00
%S: 10.20
%G2-M: 11.80
Number
10000
8000
6000
4000
2000
0
Dip G0-G1
Dip G2-M
Dip S
0
50
100
150
200
250
Channels (FL2-A-FL2 A - PI)

FIG. 4B

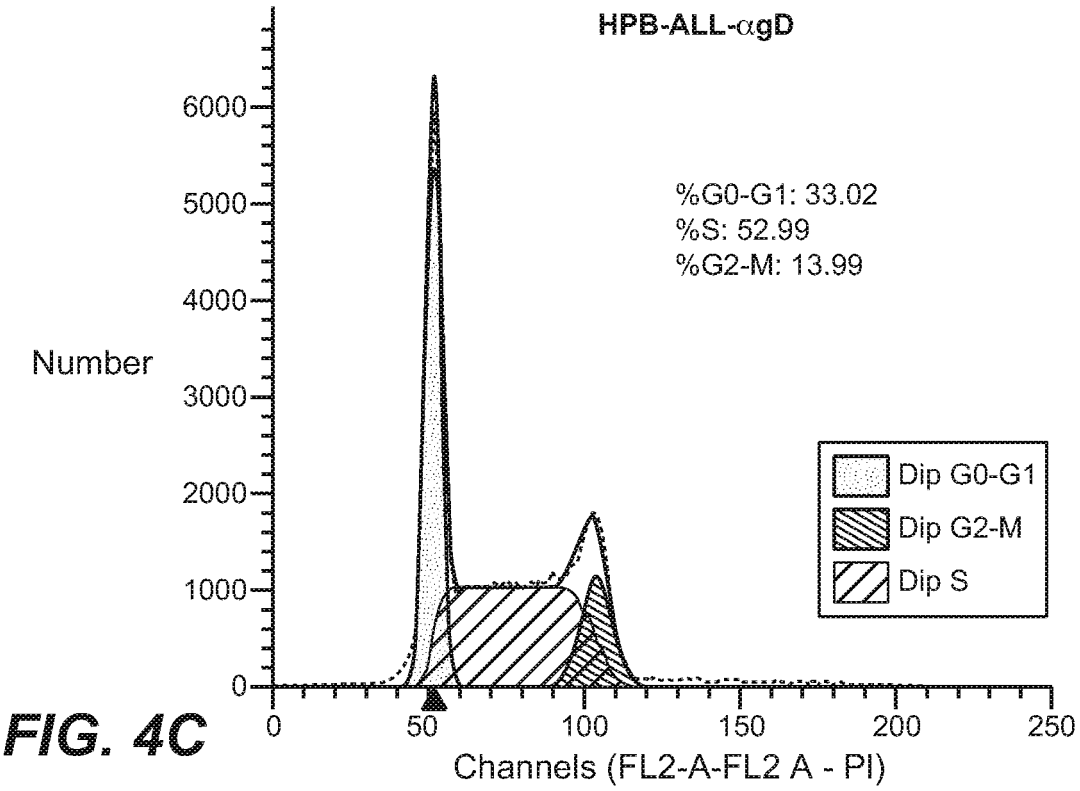

HPB-ALL-αgD
%G0-G1: 33.02
%S: 52.99
%G2-M: 13.99
Number
6000
5000
4000
3000
2000
1000
0
0
50
100
150
200
250
Channels (FL2-A-FL2 A - PI)
Dip G0-G1
Dip G2-M
Dip S

FIG. 4C

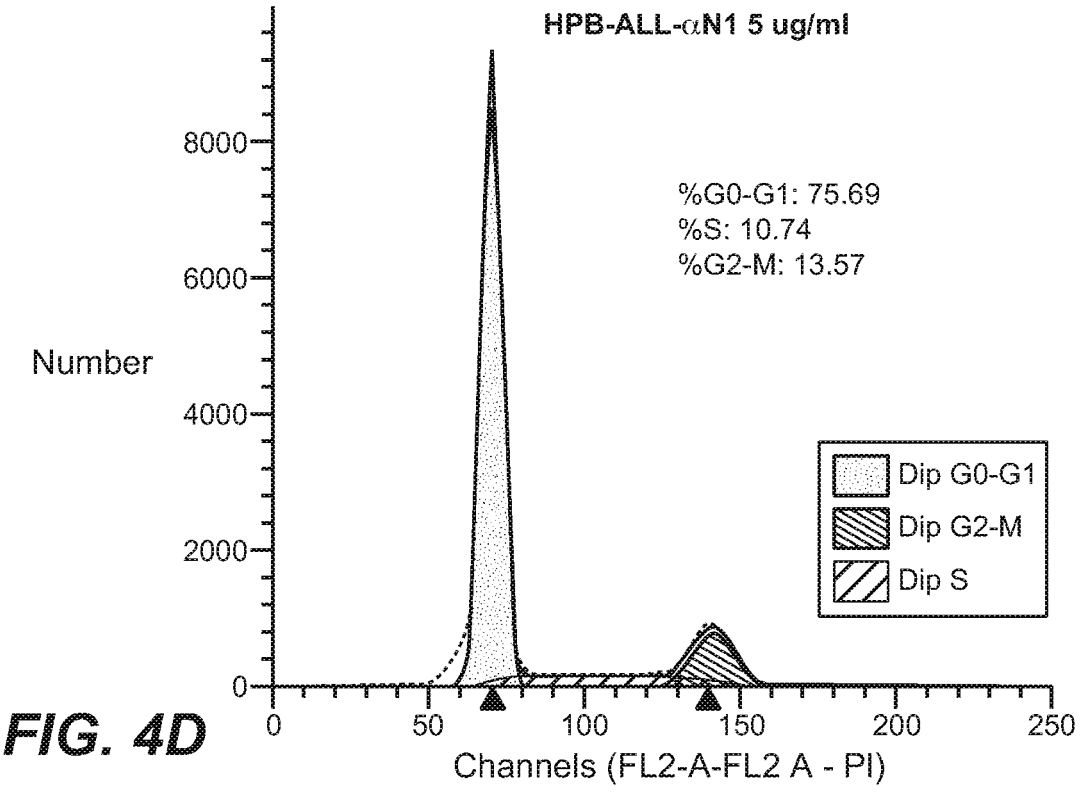

HPB-ALL-αN1 5 ug/ml
%G0-G1: 75.69
%S: 10.74
%G2-M: 13.57
Number
8000
6000
4000
2000
0
0
50
100
150
200
250
Channels (FL2-A-FL2 A - PI)
Dip G0-G1
Dip G2-M
Dip S

FIG. 4D

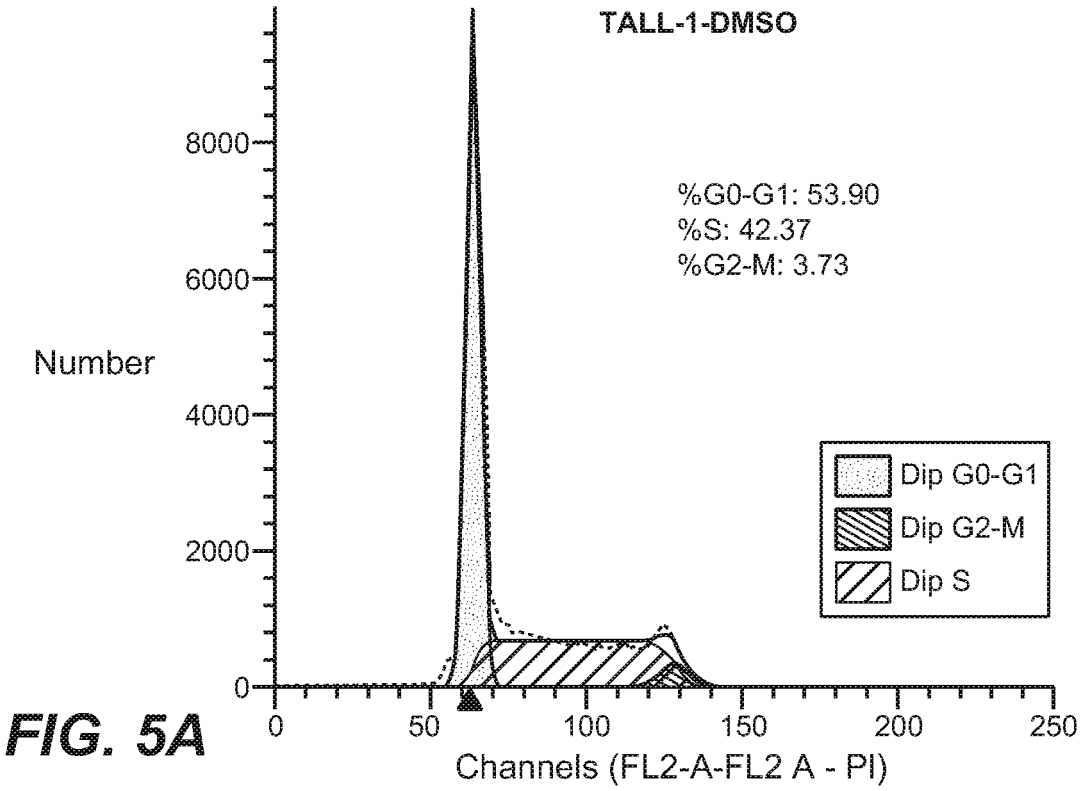

TALL-1-DMSO
%G0-G1: 53.90
%S: 42.37
%G2-M: 3.73
Number
8000
6000
4000
2000
0
0
50
100
150
200
250
Channels (FL2-A-FL2 A - PI)
Dip G0-G1
Dip G2-M
Dip S

FIG. 5A

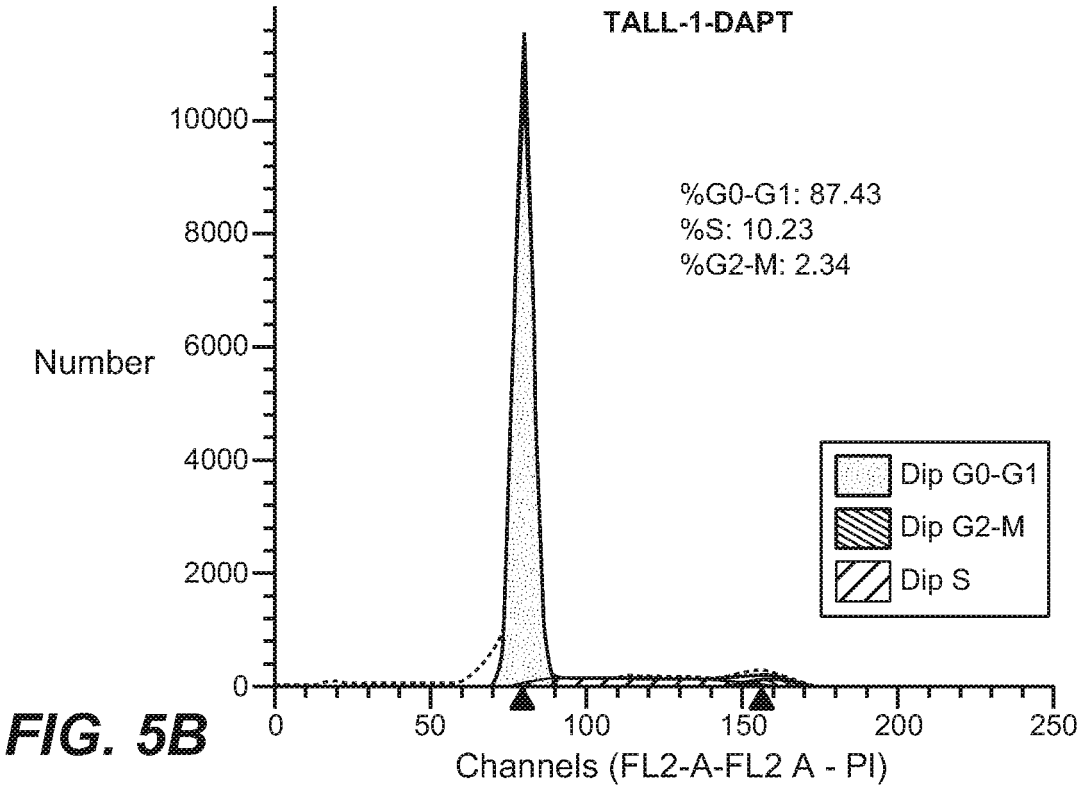

TALL-1-DAPT
%G0-G1: 87.43
%S: 10.23
%G2-M: 2.34
Number
10000
8000
6000
4000
2000
0
0
50
100
150
200
250
Channels (FL2-A-FL2 A - PI)
Dip G0-G1
Dip G2-M
Dip S

FIG. 5B

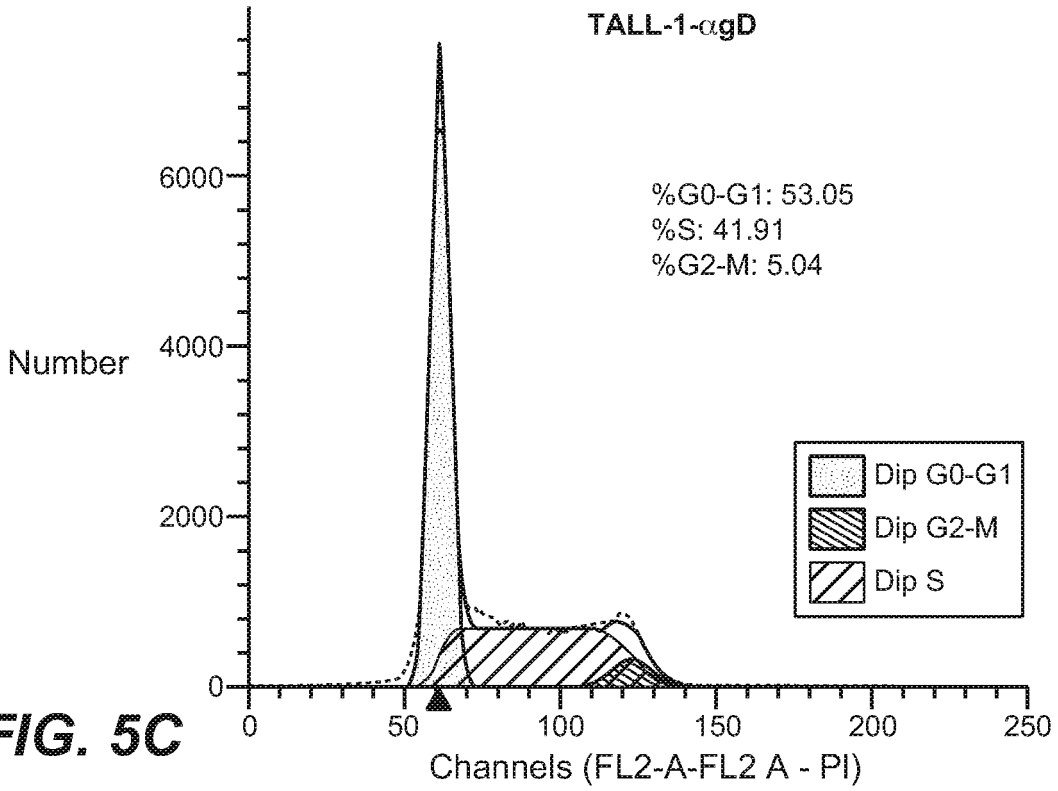

TALL-1-αgD
%G0-G1: 53.05
%S: 41.91
%G2-M: 5.04
Number
6000
4000
2000
0
Dip G0-G1
Dip G2-M
Dip S
0
50
100
150
200
250
Channels (FL2-A-FL2 A - PI)

FIG. 5C

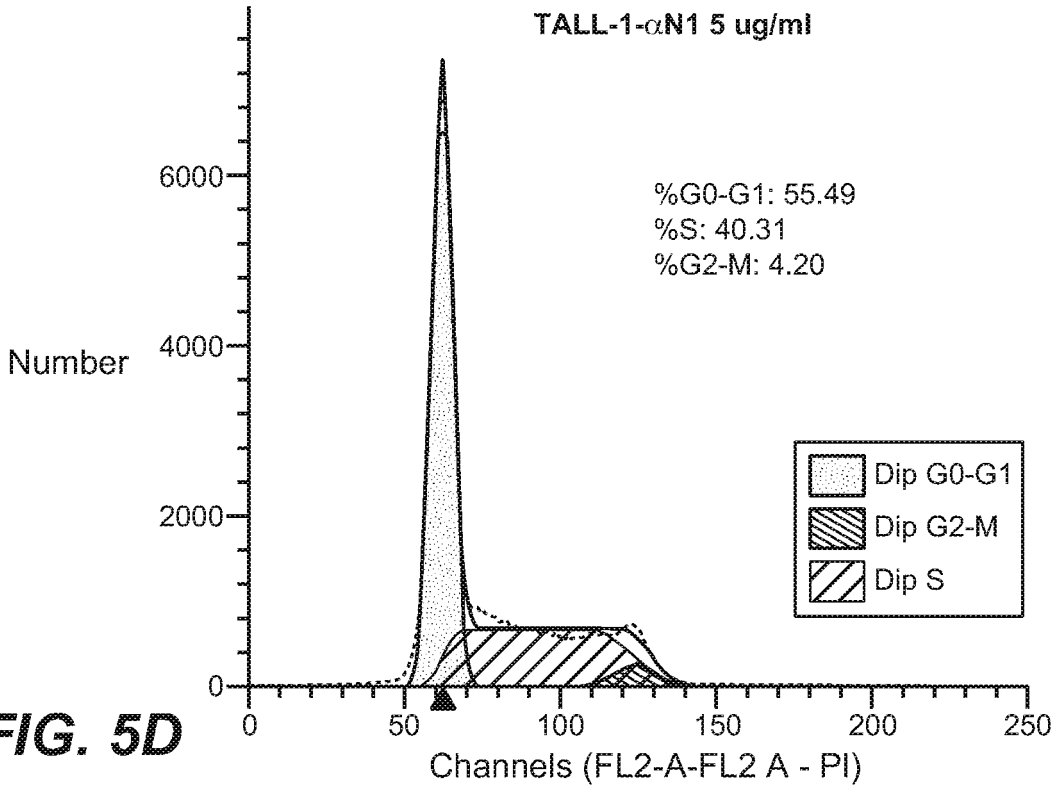

TALL-1-αN1 5 ug/ml
%G0-G1: 55.49
%S: 40.31
%G2-M: 4.20
Number
6000
4000
2000
0
Dip G0-G1
Dip G2-M
Dip S
0
50
100
150
200
250
Channels (FL2-A-FL2 A - PI)

FIG. 5D

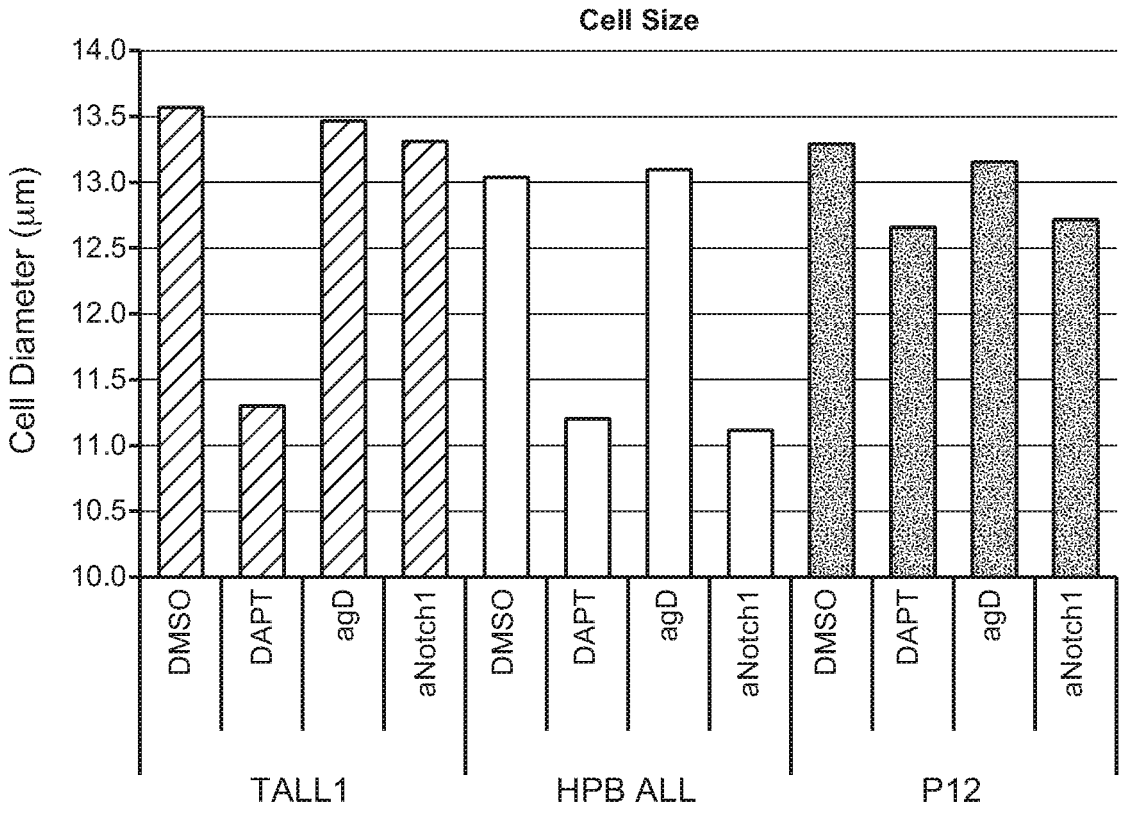

Cell Size
Cell Diameter (µm)
14.0
13.5
13.0
12.5
12.0
11.5
11.0
10.5
10.0
DMSO
DAPT
agD
aNotch1
DMSO
DAPT
agD
aNotch1
DMSO
DAPT
agD
aNotch1
TALL1
HPB ALL
P12

FIG. 6

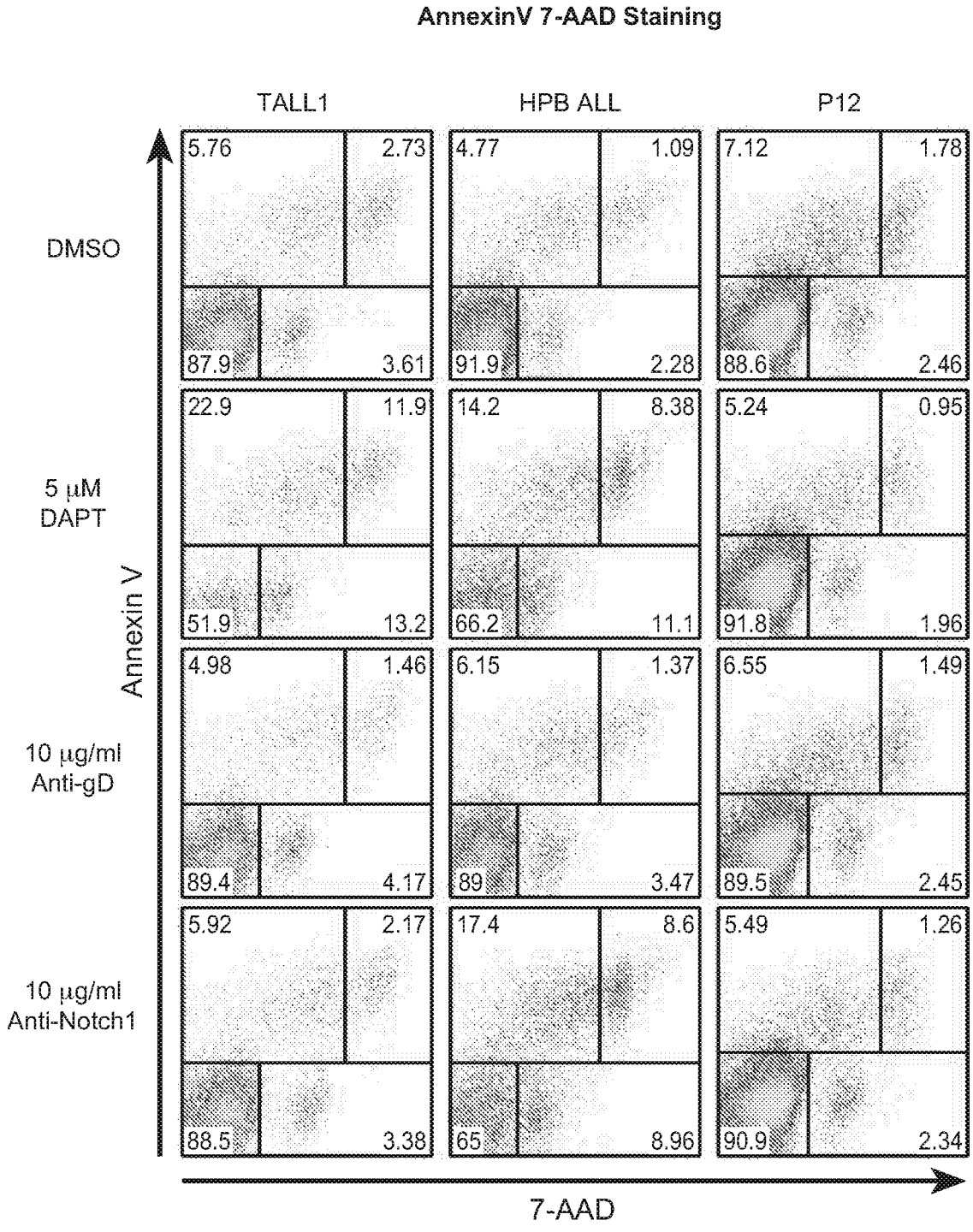

AnnexinV 7-AAD Staining
TALL1
HPB ALL
P12
DMSO
5 μM DAPT
10 μg/ml Anti-gD
10 μg/ml Anti-Notch1
Annexin V
7-AAD
5.76
2.73
87.9
3.61
4.77
1.09
91.9
2.28
7.12
1.78
88.6
2.46
22.9
11.9
51.9
13.2
14.2
8.38
66.2
11.1
5.24
0.95
91.8
1.96
4.98
1.46
89.4
4.17
6.15
1.37
89
3.47
6.55
1.49
89.5
2.45
5.92
2.17
88.5
3.38
17.4
8.6
65
8.96
5.49
1.26
90.9
2.34

FIG. 7

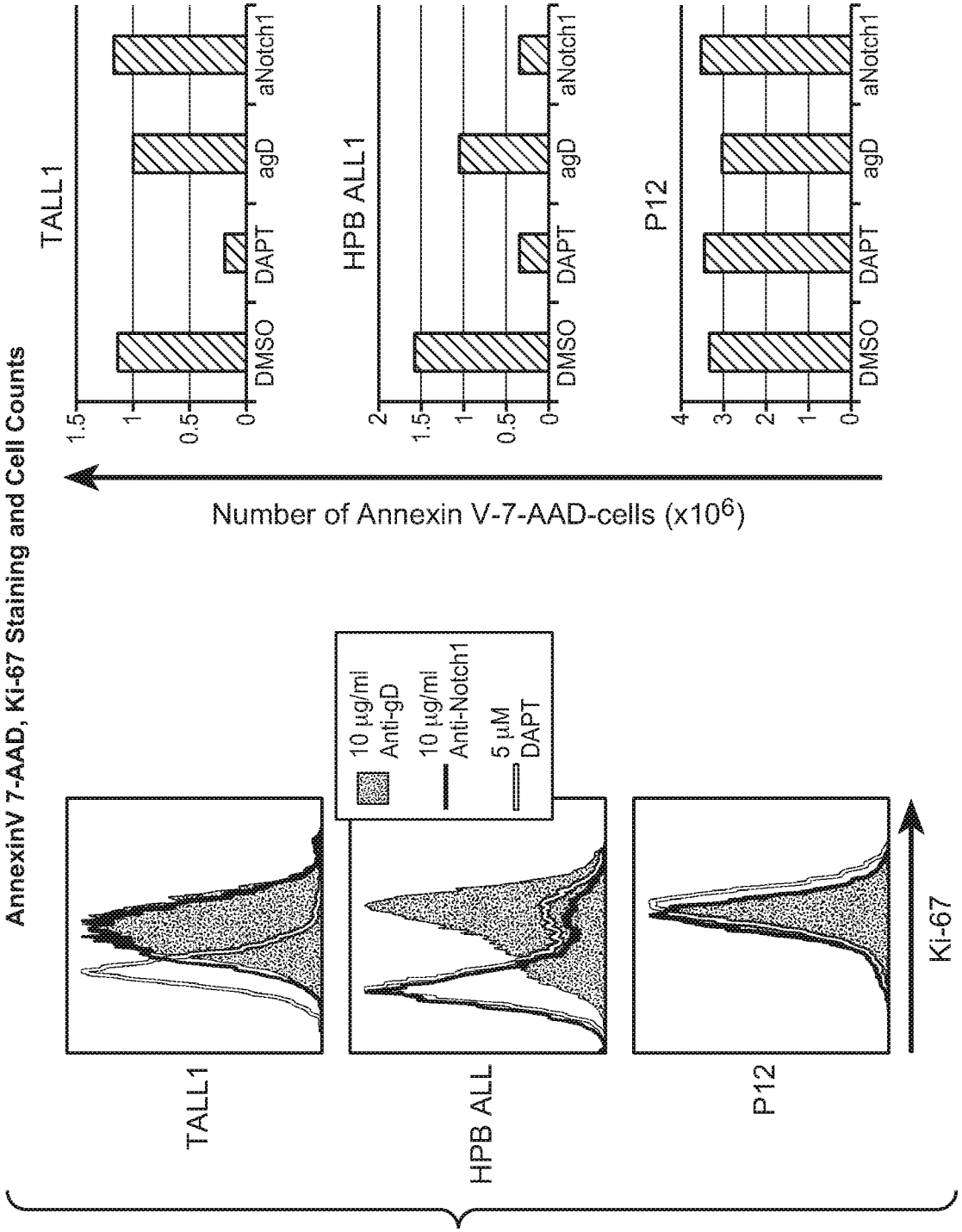

AnnexinV 7-AAD, Ki-67 Staining and Cell Counts
TALL1
HPB ALL
P12
10 µg/ml Anti-gD
10 µg/ml Anti-Notch1
5 µM DAPT
Ki-67
TALL1
HPB ALL1
P12
DMSO
DAPT
agD
aNotch1
Number of Annexin V-7-AAD-cells (x10^6)

FIG. 8

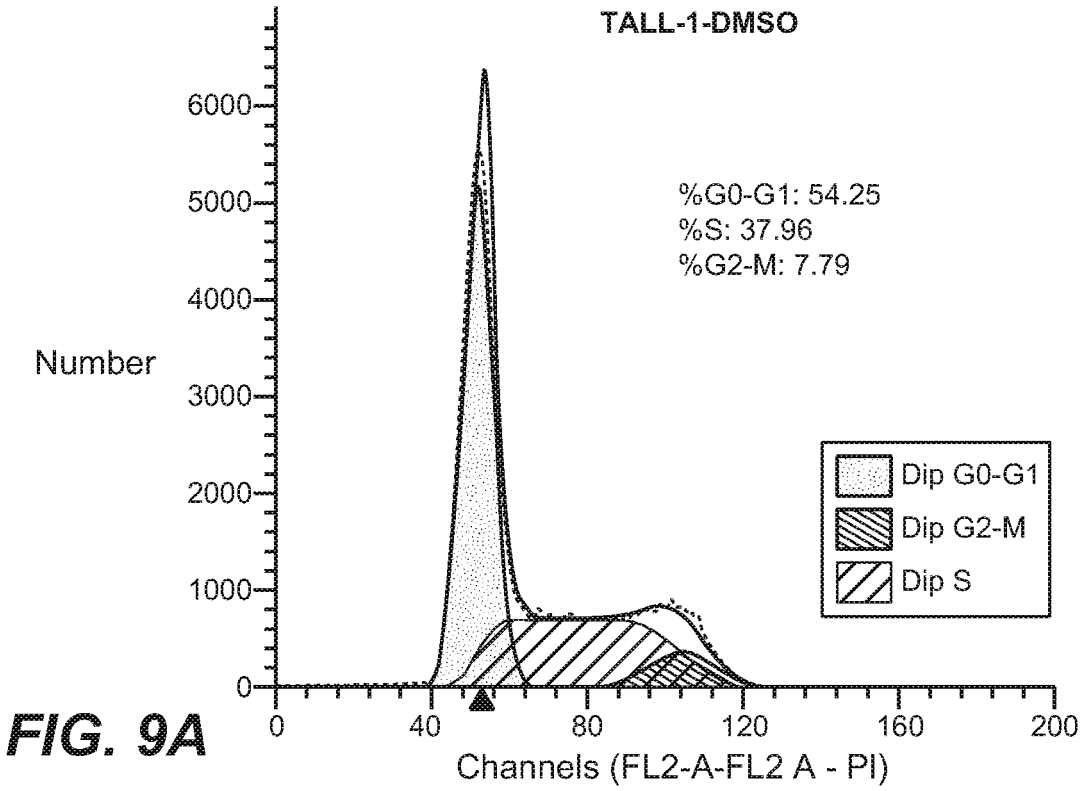

TALL-1-DMSO
%G0-G1: 54.25
%S: 37.96
%G2-M: 7.79
Number
6000
5000
4000
3000
2000
1000
0
Dip G0-G1
Dip G2-M
Dip S
0
40
80
120
160
200
Channels (FL2-A-FL2 A - PI)

FIG. 9A

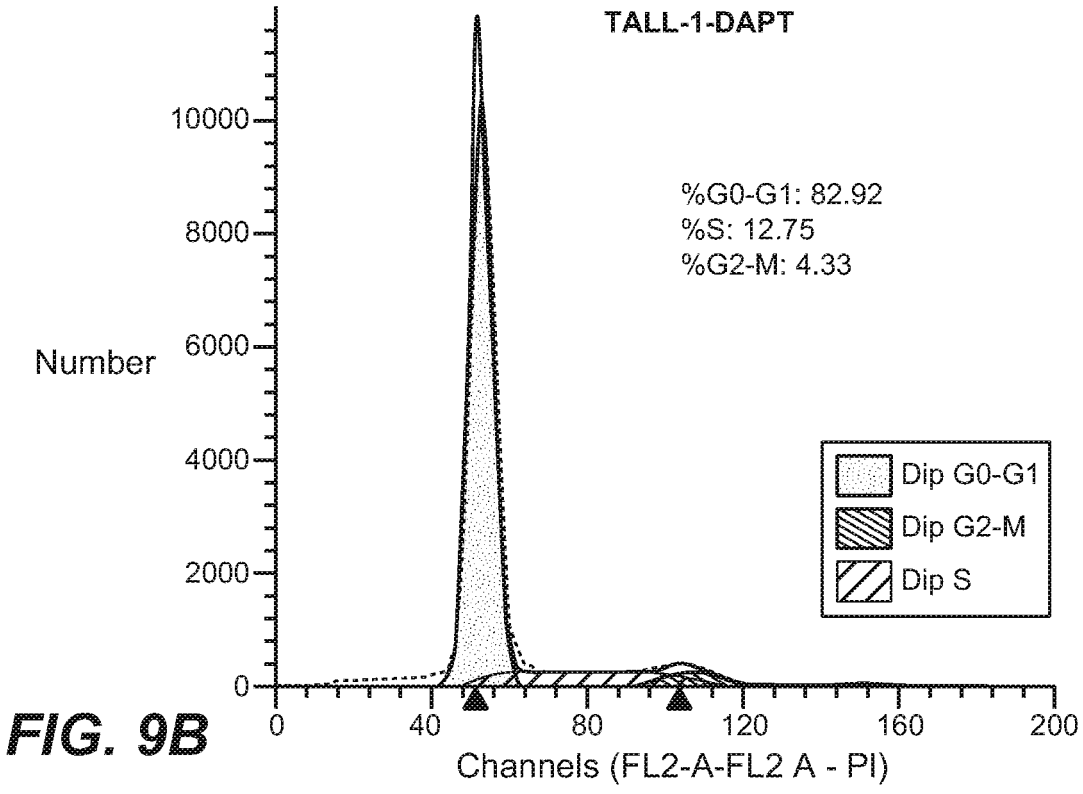

TALL-1-DAPT
%G0-G1: 82.92
%S: 12.75
%G2-M: 4.33
Number
10000
8000
6000
4000
2000
0
Dip G0-G1
Dip G2-M
Dip S
0
40
80
120
160
200
Channels (FL2-A-FL2 A - PI)

FIG. 9B

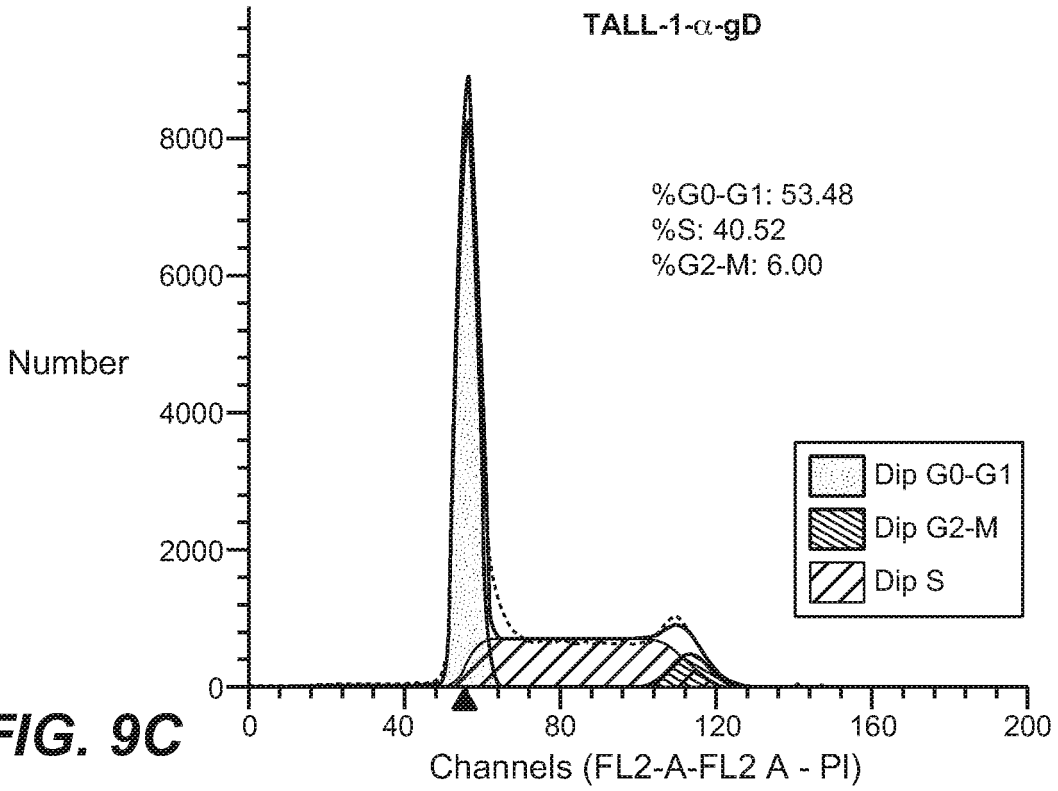

TALL-1-α-gD
%G0-G1: 53.48
%S: 40.52
%G2-M: 6.00
Number
8000
6000
4000
2000
0
0
40
80
120
160
200
Channels (FL2-A-FL2 A - PI)
Dip G0-G1
Dip G2-M
Dip S

FIG. 9C

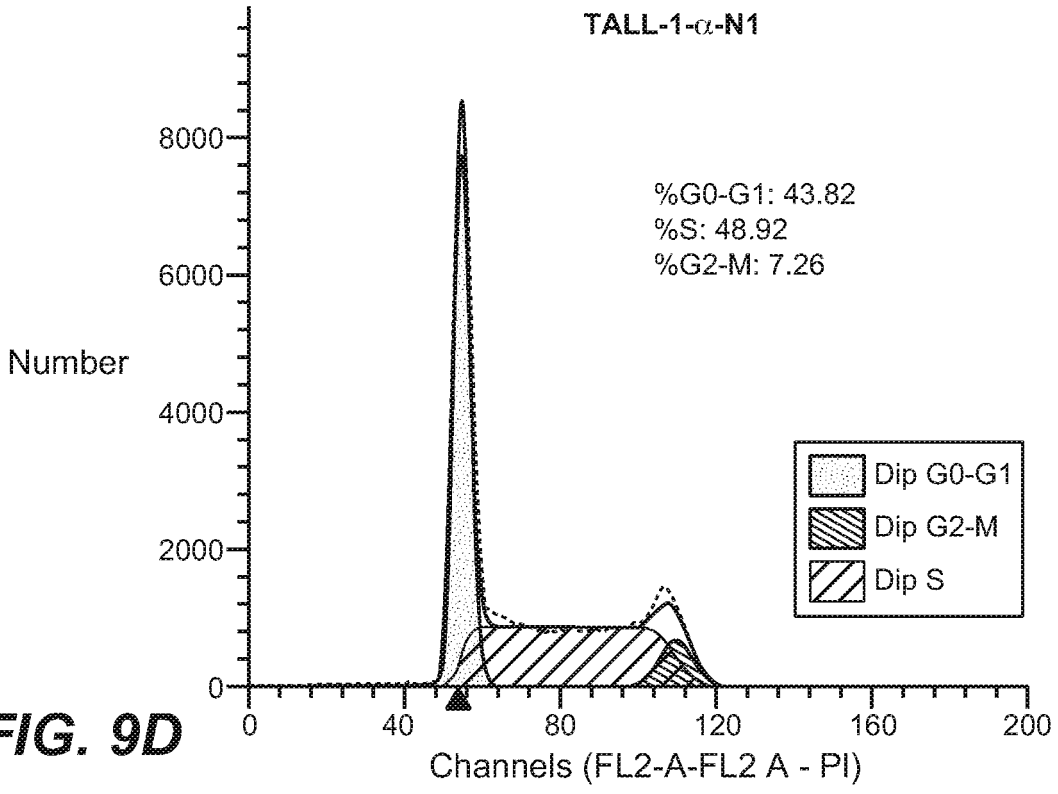

TALL-1-α-N1
%G0-G1: 43.82
%S: 48.92
%G2-M: 7.26
Number
8000
6000
4000
2000
0
0
40
80
120
160
200
Channels (FL2-A-FL2 A - PI)
Dip G0-G1
Dip G2-M
Dip S

FIG. 9D

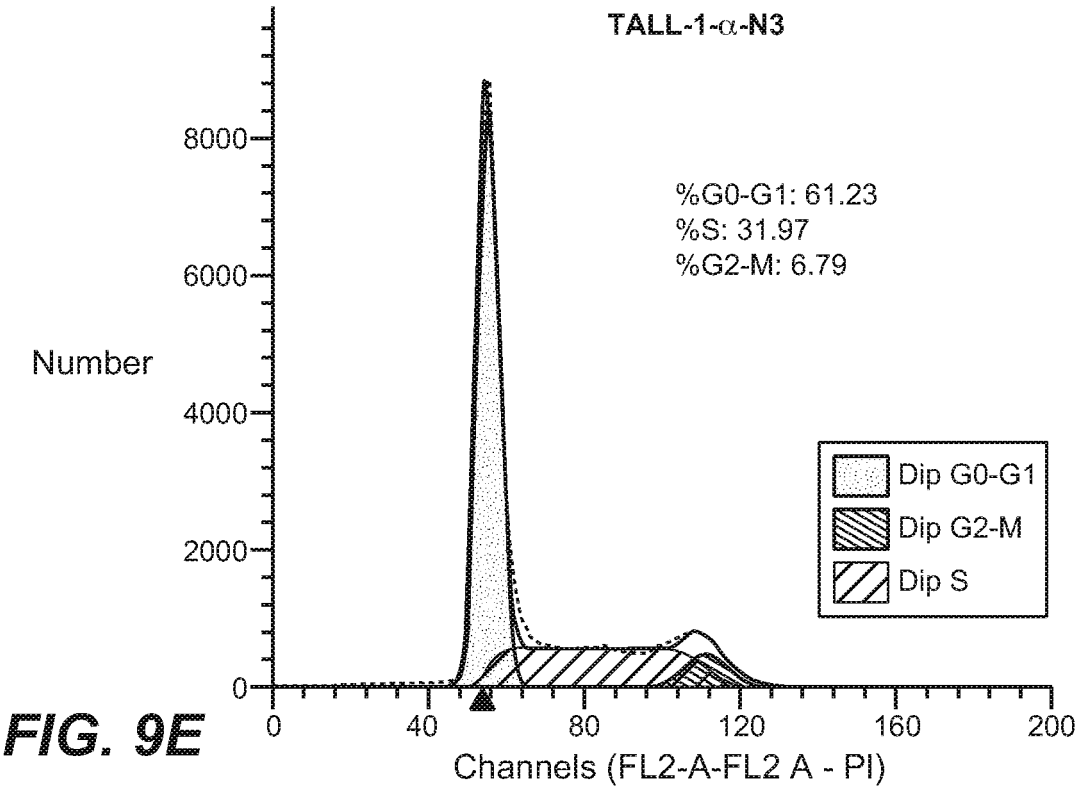

TALL-1-α-N3
%G0-G1: 61.23
%S: 31.97
%G2-M: 6.79
Number
8000
6000
4000
2000
0
0
40
80
120
160
200
Channels (FL2-A-FL2 A - PI)
Dip G0-G1
Dip G2-M
Dip S

FIG. 9E

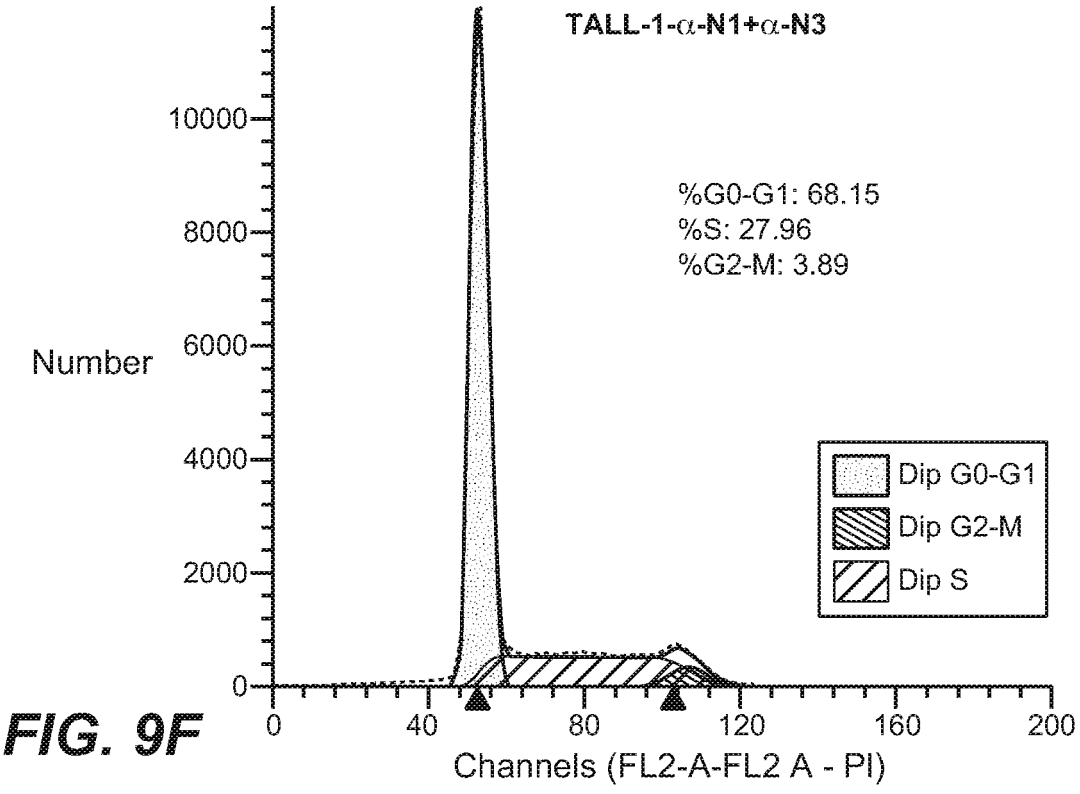

TALL-1-α-N1+α-N3
%G0-G1: 68.15
%S: 27.96
%G2-M: 3.89
Number
10000
8000
6000
4000
2000
0
0
40
80
120
160
200
Channels (FL2-A-FL2 A - PI)
Dip G0-G1
Dip G2-M
Dip S

FIG. 9F

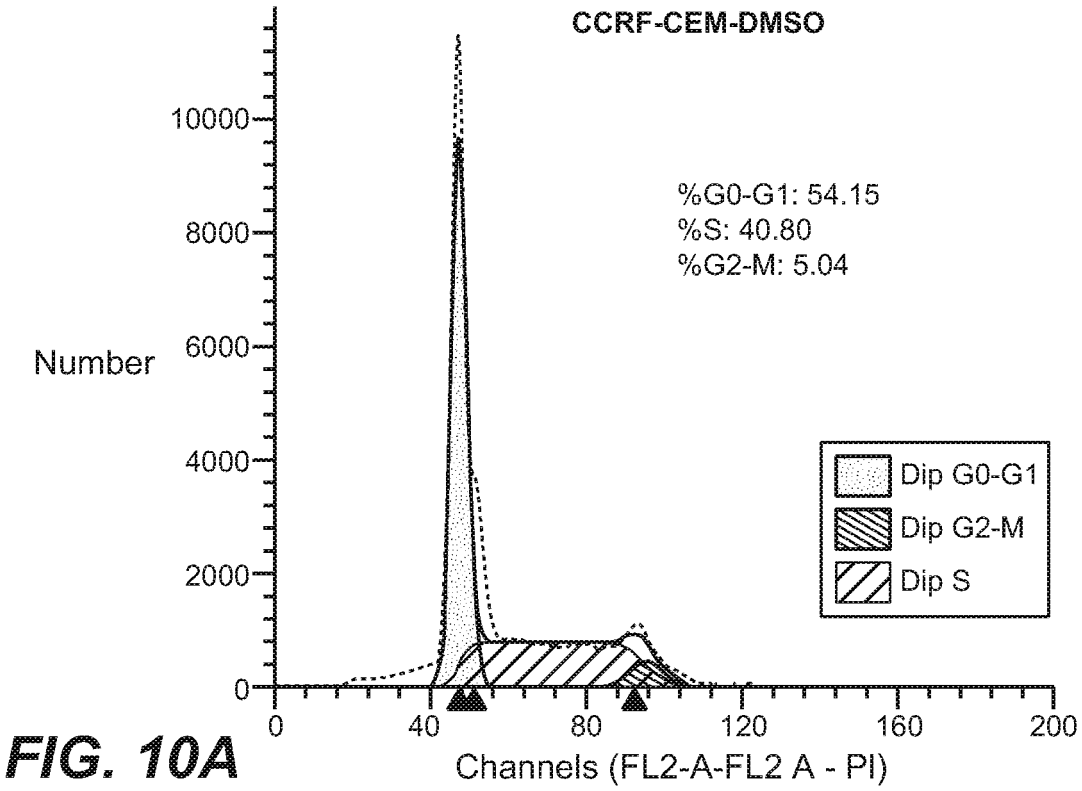


FIG. 10A

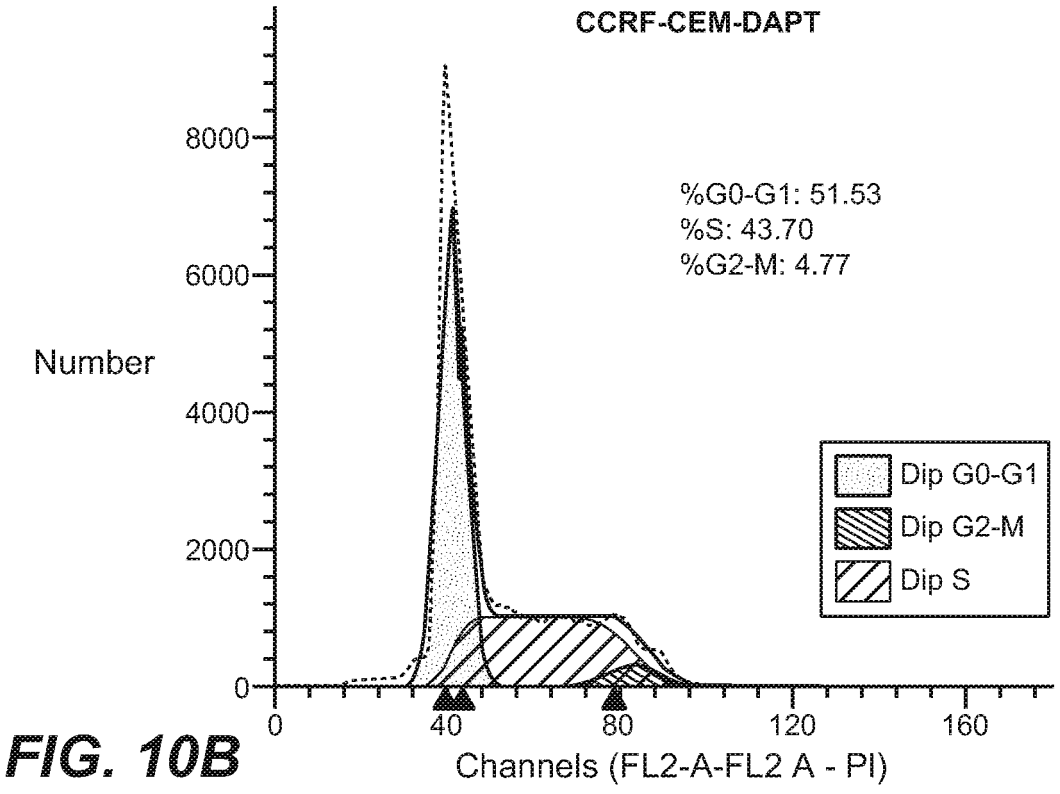


FIG. 10B

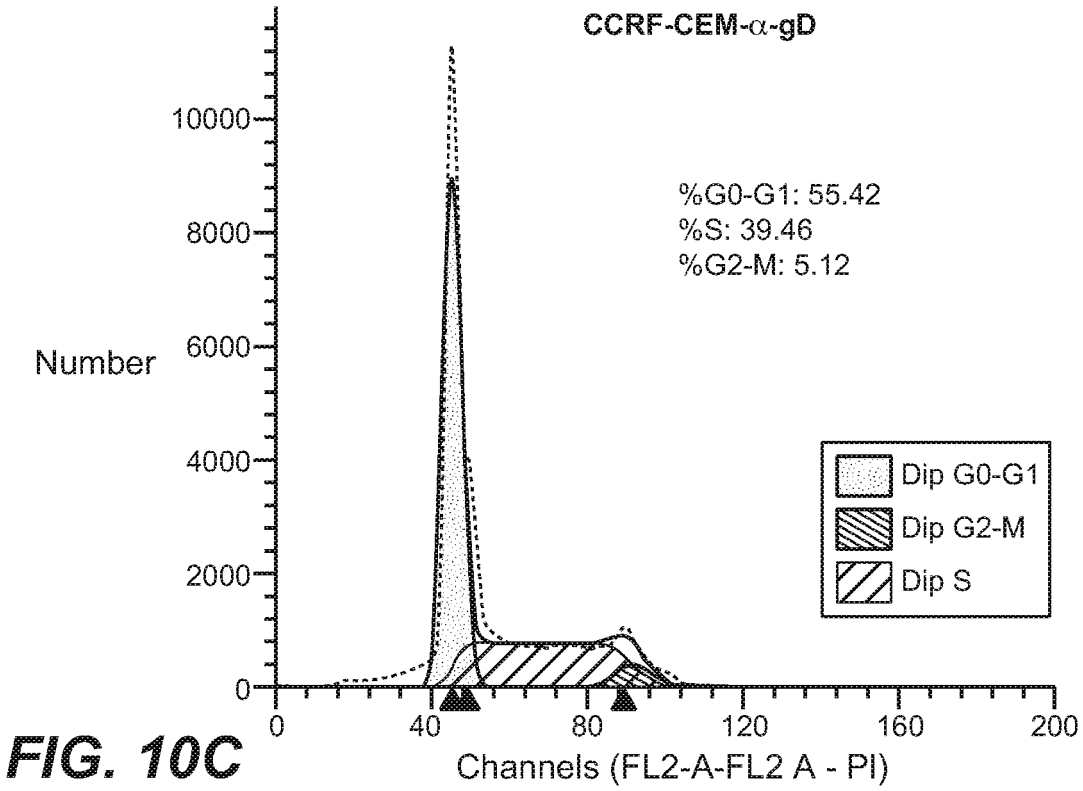


FIG. 10C

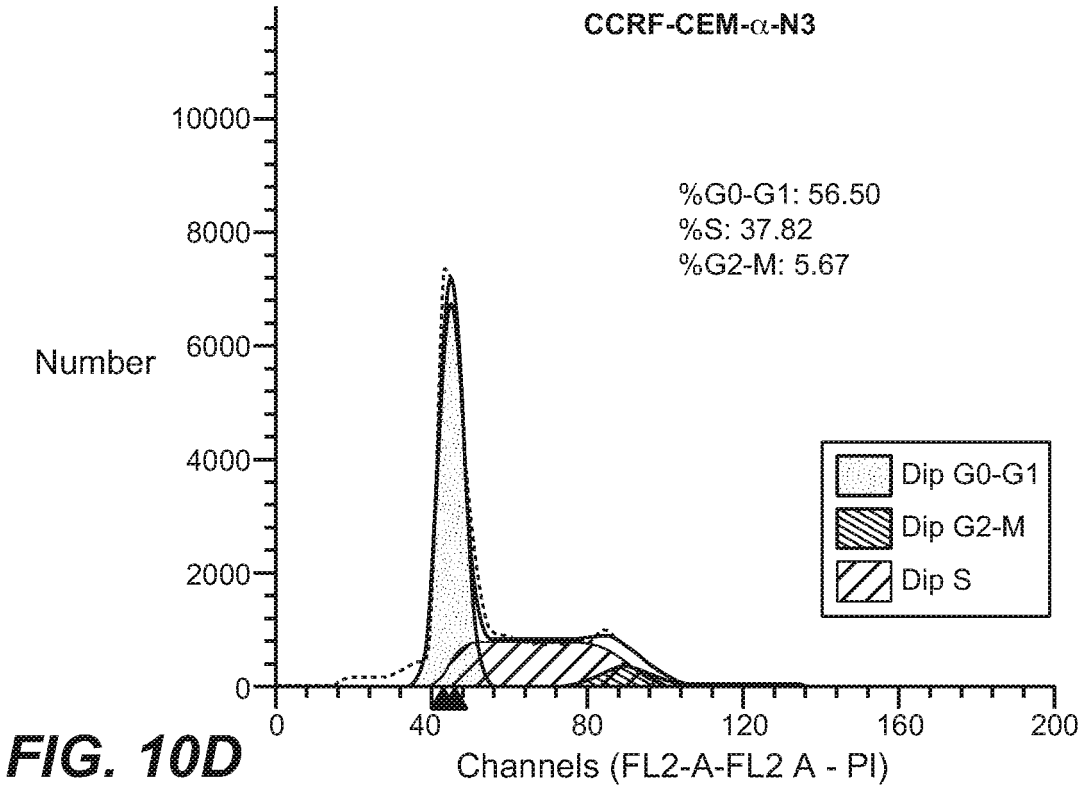


FIG. 10D

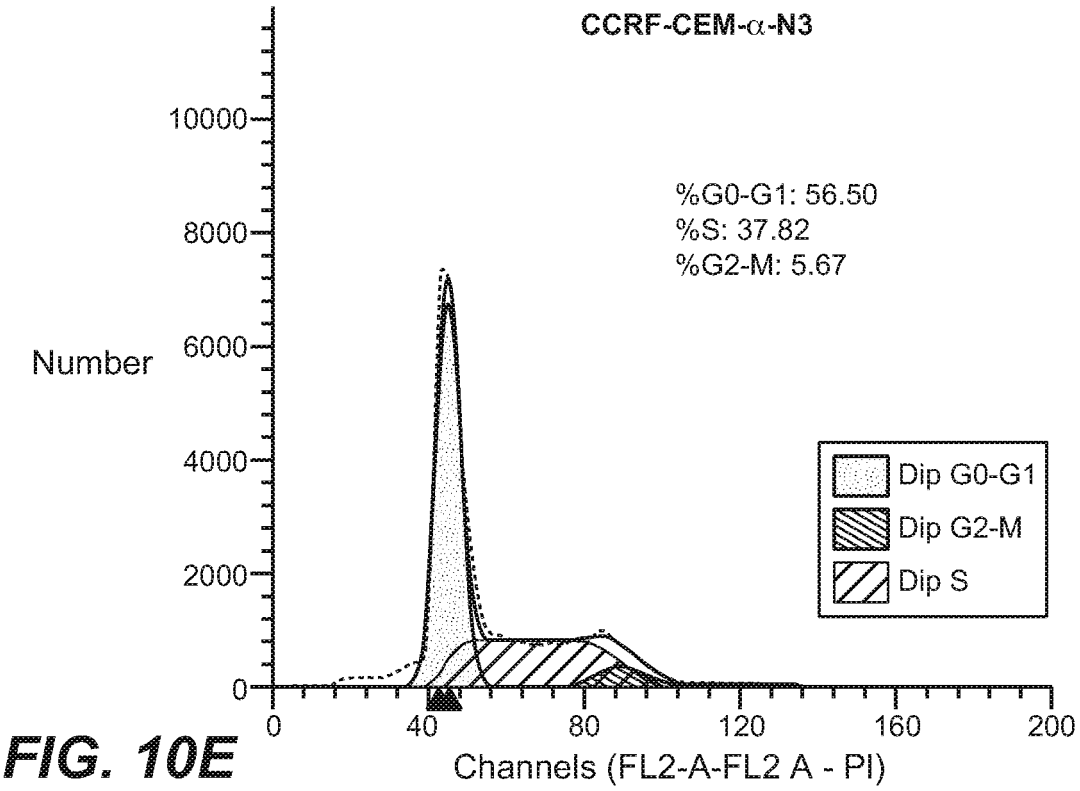


FIG. 10E

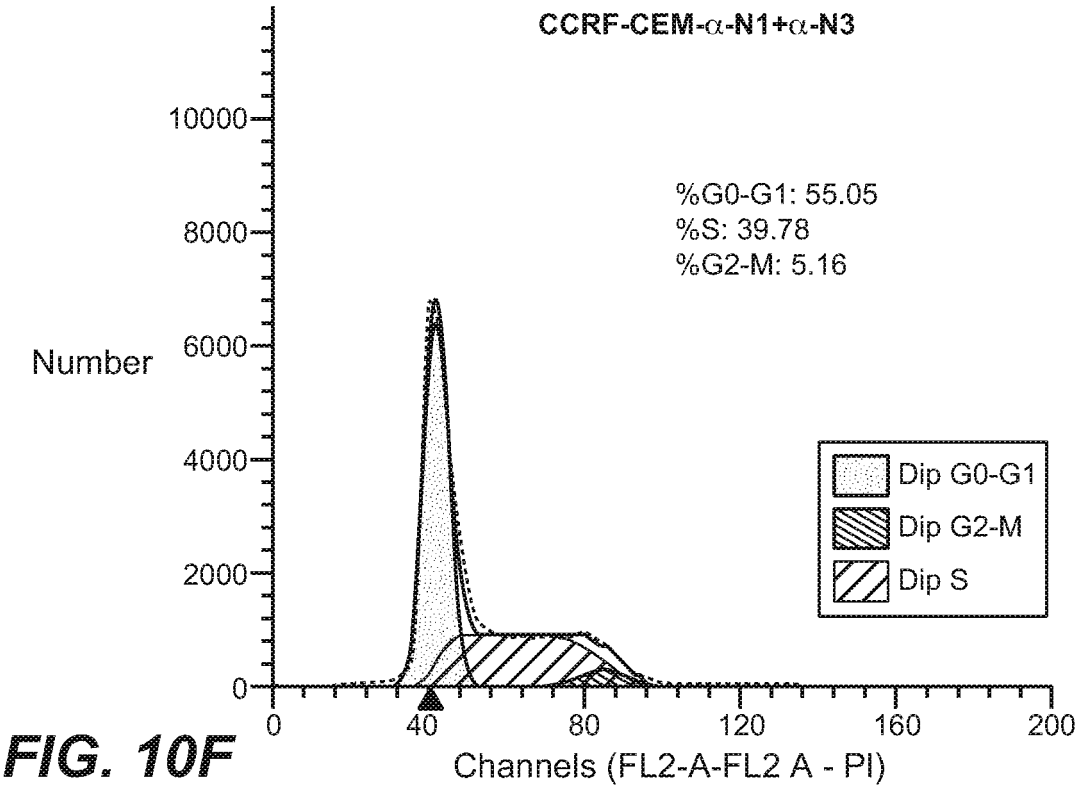


FIG. 10F

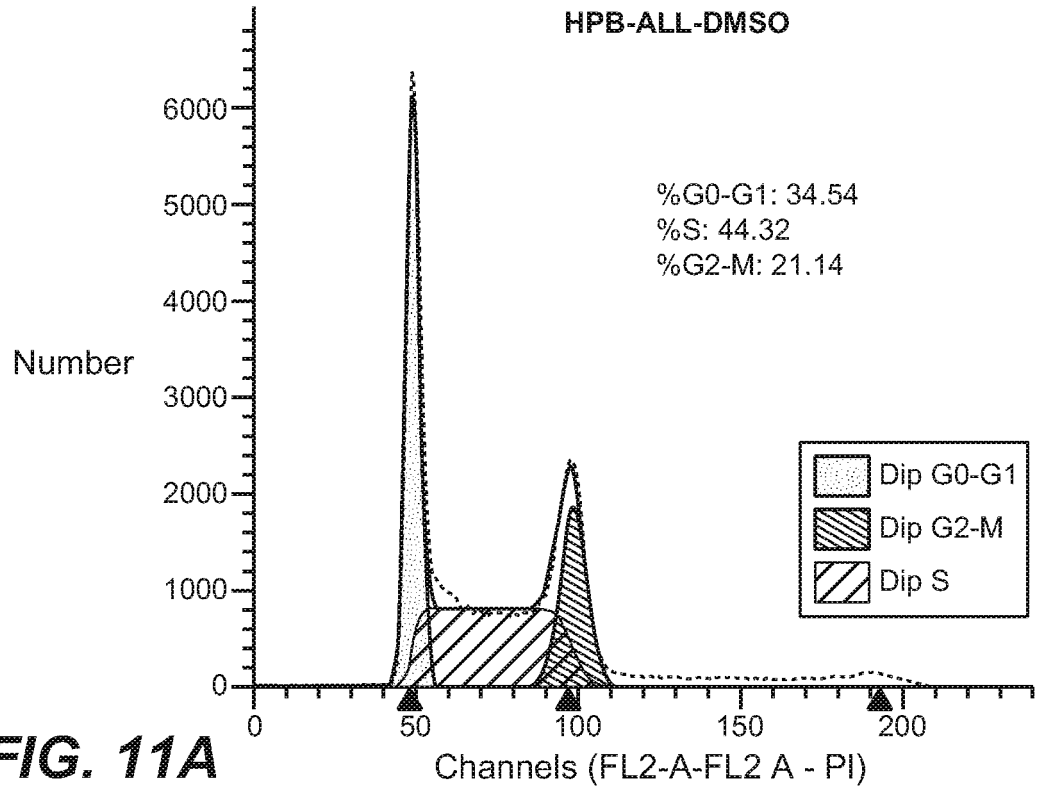


FIG. 11A

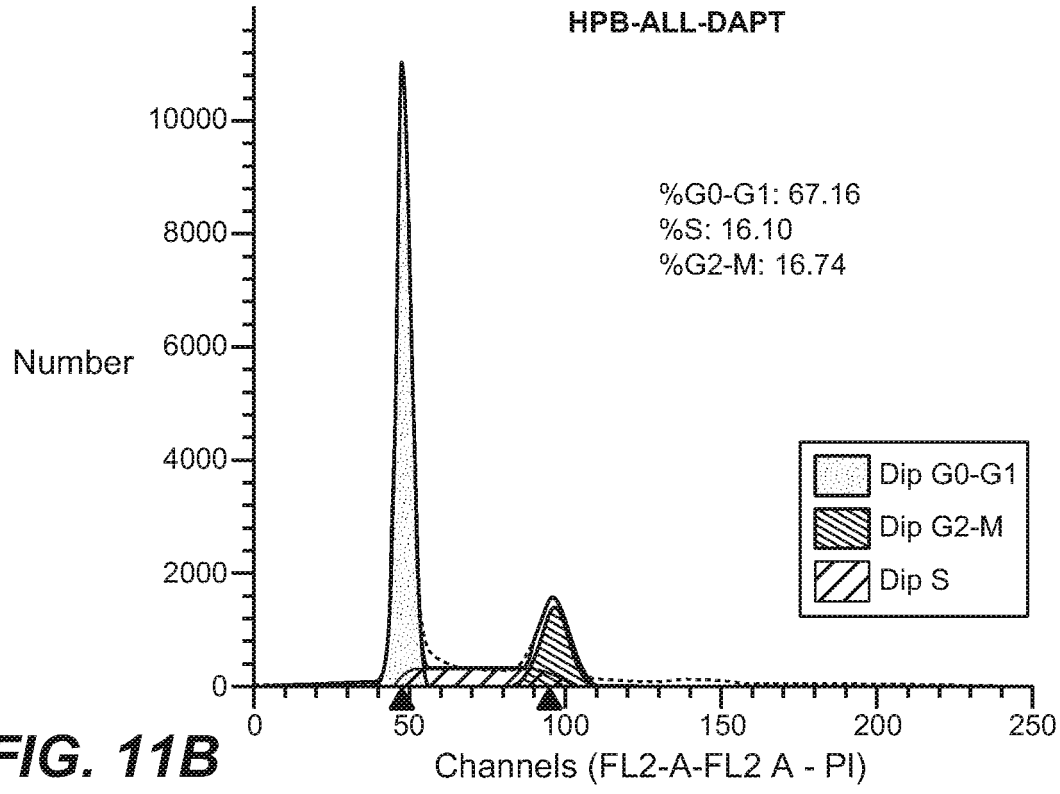


FIG. 11B

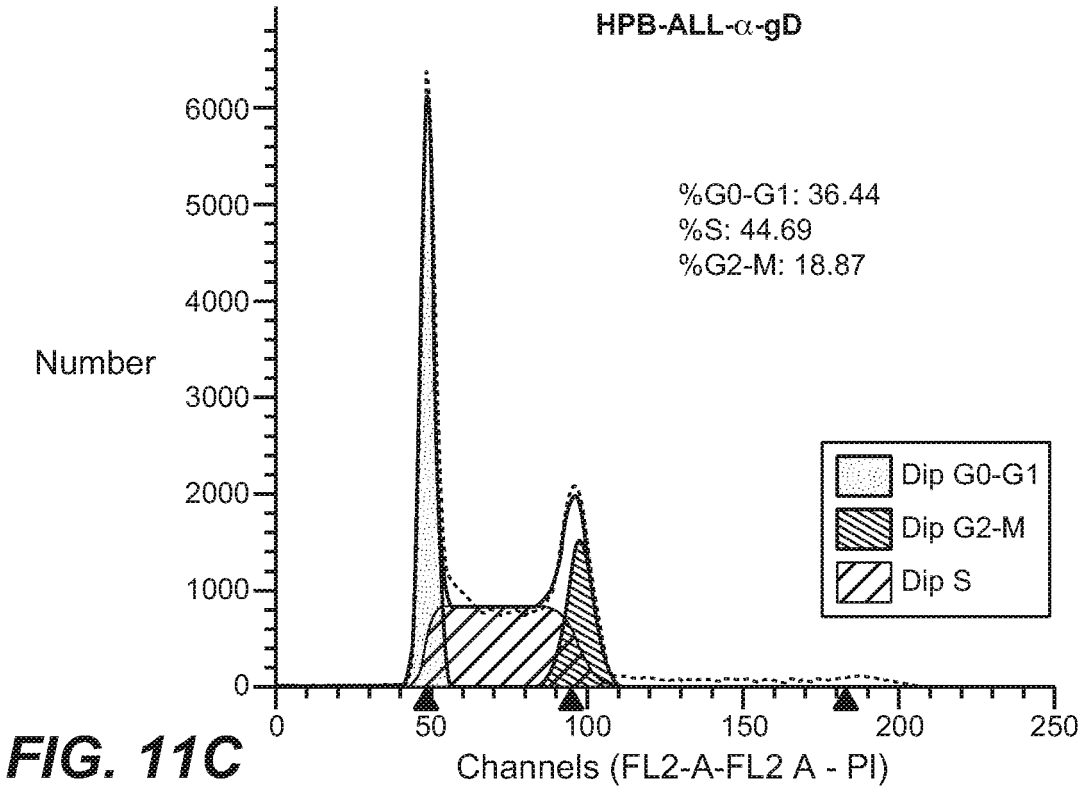


FIG. 11C

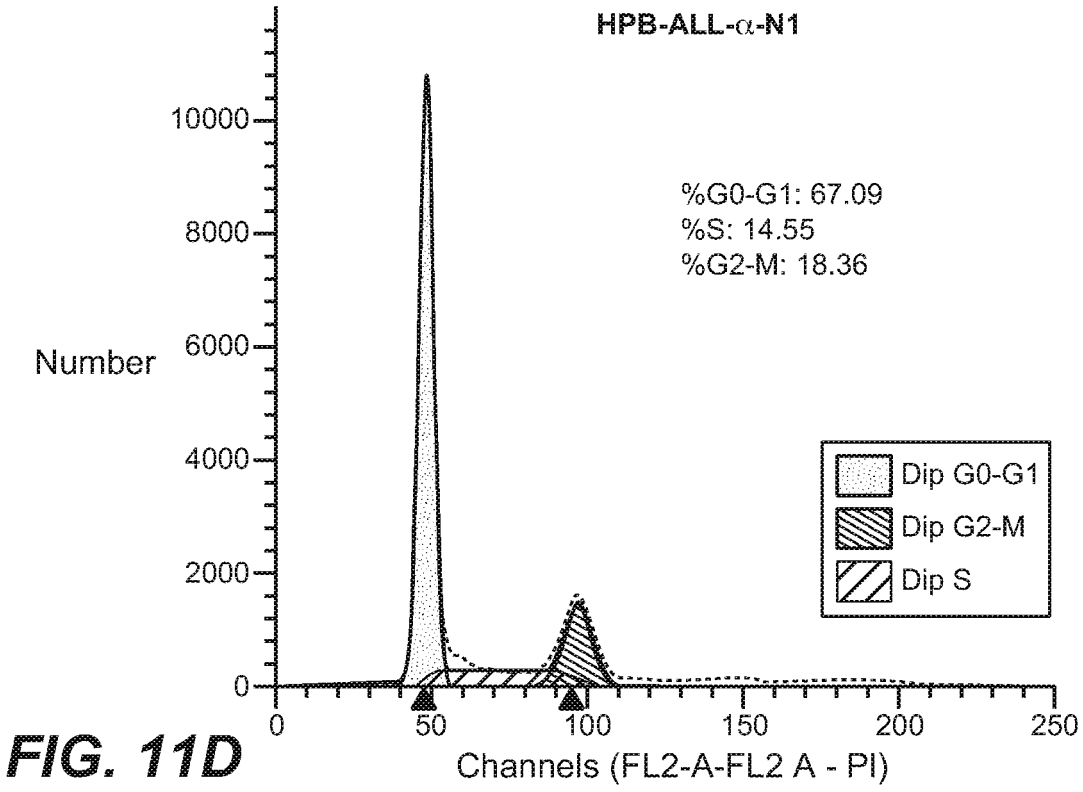


FIG. 11D

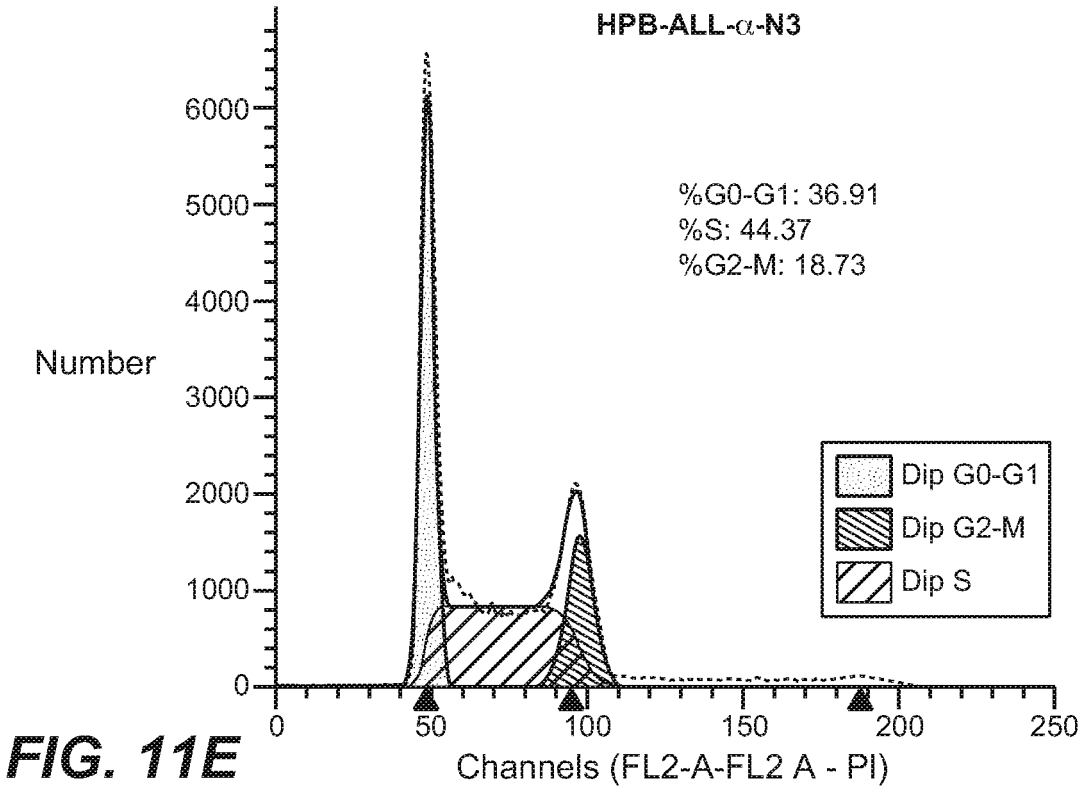


FIG. 11E

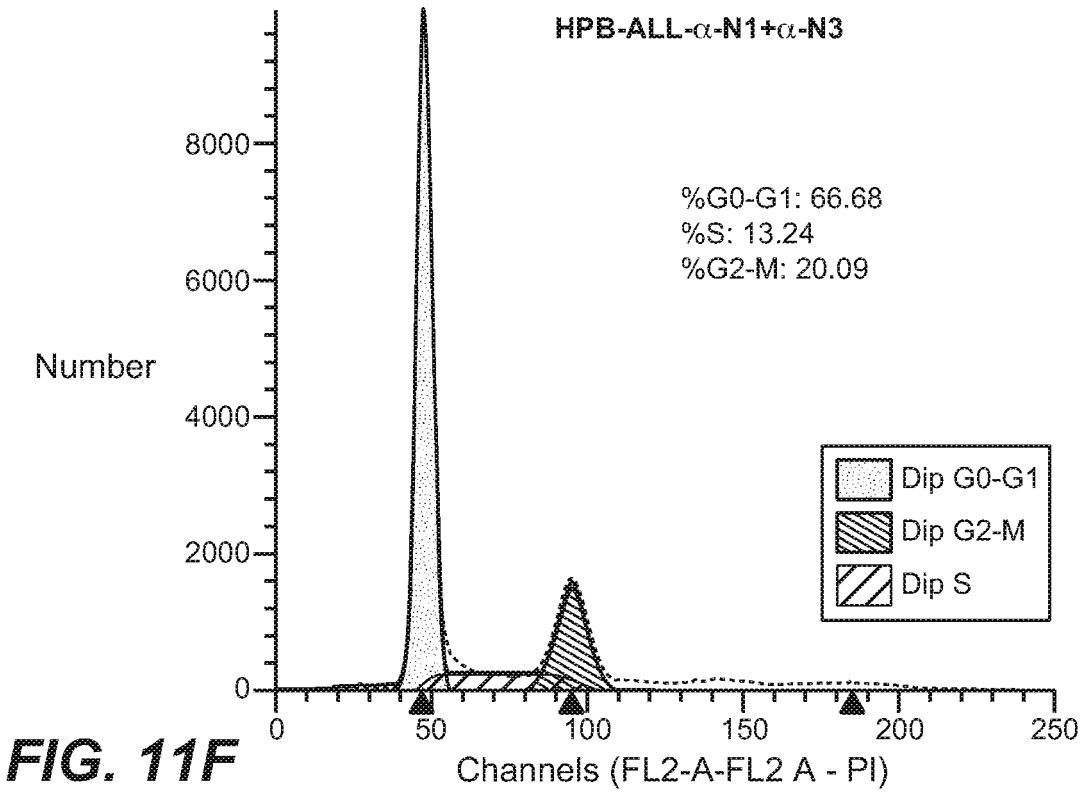


FIG. 11F

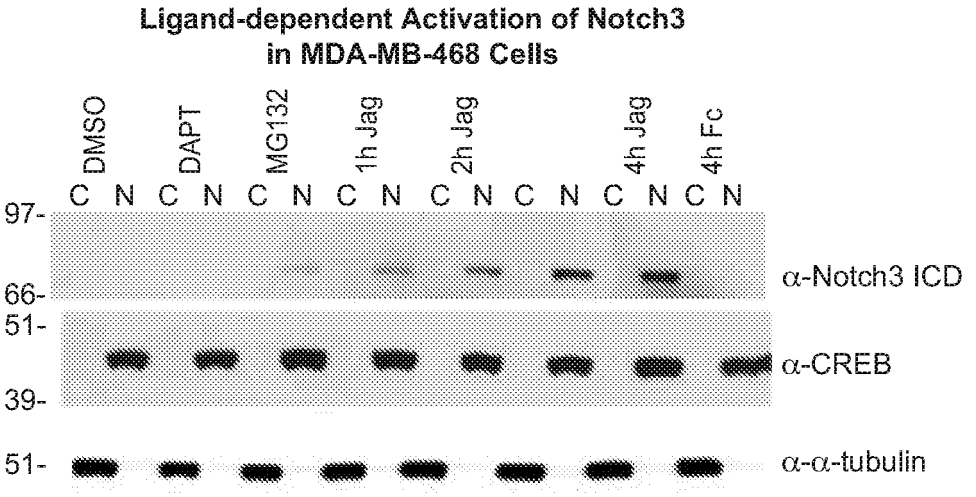
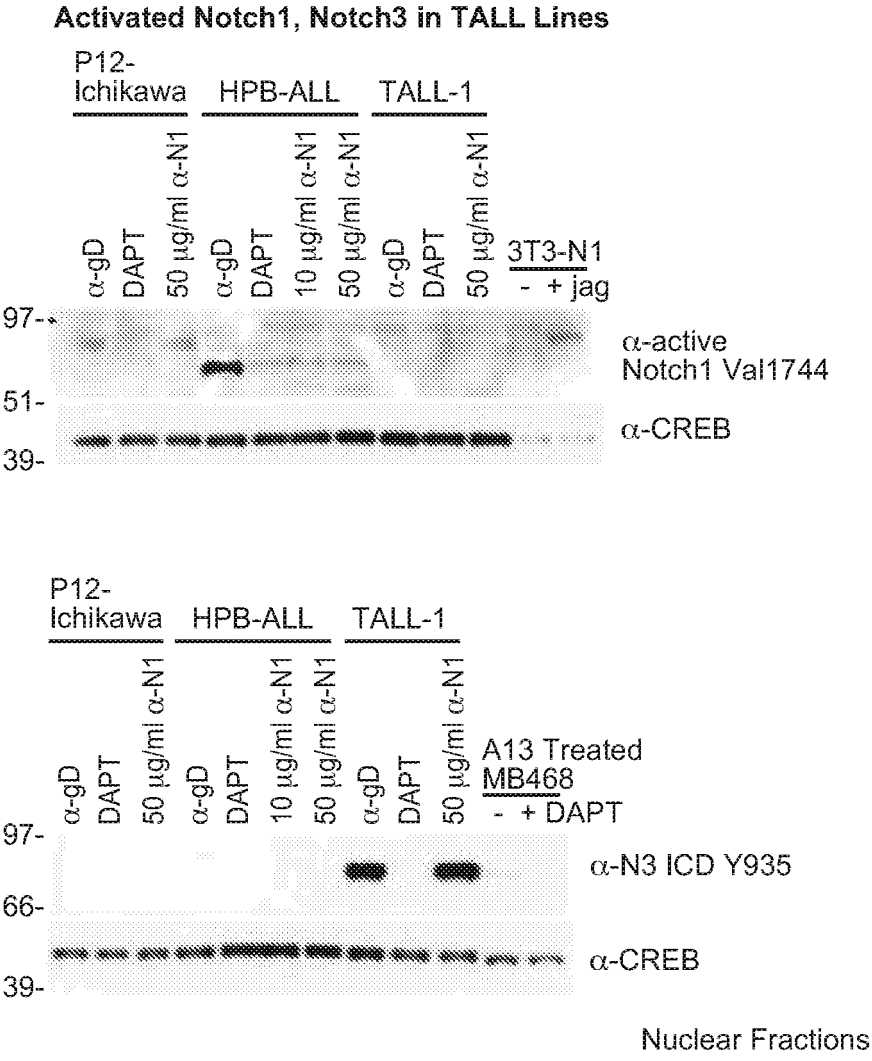

Ligand-dependent Activation of Notch3
in MDA-MB-468 Cells
DMSO
DAPT
MG132
1h Jag
2h Jag
4h Jag
4h Fc
C N C N C N C N C N C N C N C N
97-
66-
51-
39-
51-
α-Notch3 ICD
α-CREB
α-α-tubulin

FIG. 12

FIG. 13


Activated Notch1, Notch3 in TALL Lines
P12-Ichikawa
HPB-ALL
TALL-1
α-gD
DAPT
50 μg/ml α-N1
10 μg/ml α-N1
3T3-N1
- + jag
97-
51-
39-
α-active Notch1 Val1744
α-CREB
A13 Treated MB468
- + DAPT
66-
α-N3 ICD Y935
Nuclear Fractions

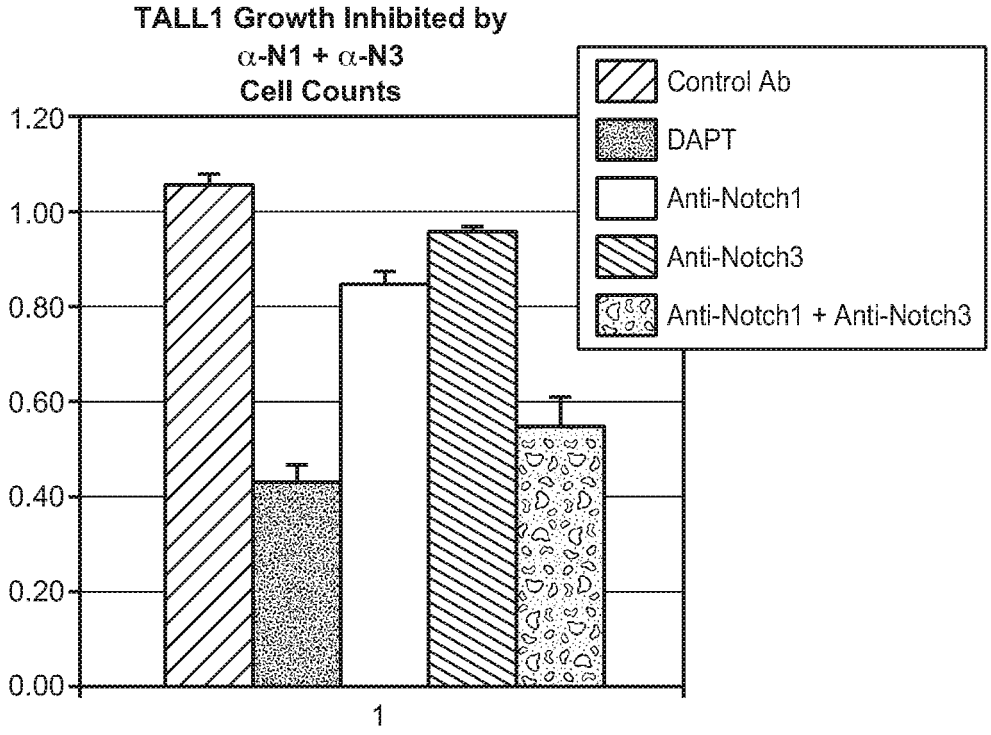

TALL1 Growth Inhibited by
α-N1 + α-N3
Cell Counts
1.20
1.00
0.80
0.60
0.40
0.20
0.00
1
Control Ab
DAPT
Anti-Notch1
Anti-Notch3
Anti-Notch1 + Anti-Notch3

FIG. 14