DIVMTQSPASLSLSQEEKVTITCRASQGIRNYLAWYQQKPG
QAPKLLIYAASTLQSGVPSRFSGSGSGTDFTLTISSLEPED
VAVYYCQRYNRAPYTFGQGTKVEIK

Figure 1

EVQLVESGGGLVQPGGSLRLSCAASGFTFDDYAMHWVRQAP
GKGLEWVSAITWNSGHIDYADSVEGRFTISRDNAKNSLYLQ
MNSLRAEDTAVYYCAKVSYLSTASSLDYWGQGTLVTVSS

Figure 2

DIVMTQSPASLSLSQEEKVTITCRASQGIRNYLAWYQQKPGQ
APKLLIYAASTLQSGVPSRFSGSGSGTDFTLTISSLEPEDVA
VYYCQRYNRAPYTFGQGTKVEIKRNDAQPAVYLFQPSPDQLH
TGSASVVCLLNSFYPKDINVKWKVDGVIQDTGIQESVTEQDK
DSTYSLSSTLTMSSTEYLSHELYSCEITHKSLPSTLIKSFQR
SECQRVD*

Figure 3

EVQLVESGGGLVQPGGSLRLSCAASGFTFDDYAMHWVRQAPGKG
LEWVSAITWNSGHIDYADSVEGRFTISRDNAKNSLYLQMNSLRA
EDTAVYYCAKVSYLSTASSLDYWGQGTLVTVSSASTTAPSVFPL
APSCGSTSGSTVALACLVSGYFPEPVTVSWNSGSLTSGVHTFPS
VLQSSGLHSLSSMVTVPSSRWPSETFTCNVVHPASNTKVDKPVF
NECRCTDTPPCPVPEPLGGPSVLIFPPKPKDILRITRTPEVTCV
VLDLGREDPEVQISWFVDGKEVHTAKTQSREQQFNGTYRVVSVL
PIEHQDWLTGKEFKCRVNHIDLPSPIERTISKARGRAHKPSVYV
LPPSPKELSSSDTVSITCLIKDFYPPDIDVEWQSNGQQEPERKH
RMTPPQLDEDGSYFLYSKLSVDKSRWQQGDPFTCAVMHETLQNH
YTDLSLSHSPGK*

Figure 4

EVQLVESGGGLVQPGGSLRLSCAASGFTFDDYAMHWVRQAPGKG
LEWVSAITWNSGHIDYADSVEGRFTISRDNAKNSLYLQMNSLRA
EDTAVYYCAKVSYLSTASSLDYWGQGTLVTVSSASTTAPSVFPL
APSCGSTSGSTVALACLVSGYFPEPVTVSWNSGSLTSGVHTFPS
VLQSSGLYSLSSMVTVPSSRWPSETFTCNVAHPASKTKVDKPVP
KRENGRVPRPPDCPKCPAPEMLGGPSVFIFPPKPKDTLLIARTP
EVTCVVVDLDPEDPEVQISWFVDGKQMQTAKTQPREEQFNGTYR
VVSVLPIGHQDWLKGKQFTCKVNNKALPSPIERTISKARGQAHQ
PSVYVLPPSREELSKNTVSLTCLIKDFYPPDIDVEWQSNGQQEP
ESKYRTTPPQLDEDGSYFLYSKLSVDKSRWQRGDTFICAVMHEA
LHNHYTQESLSHSPGK*

Figure 5

EVQLVESGGGLVQPGGSLRLSCAASGFTFDDYAMHWVRQAPGKG
LEWVSAITWNSGHIDYADSVEGRFTISRDNAKNSLYLQMNSLRA
EDTAVYYCAKVSYLSTASSLDYWGQGTLVTVSSASTTAPSVFPL
APSCGSQSGSTVALACLVSGYIPEPVTVSWNSVSLTSGVHTFPS
VLQSSGLYSLSSMVTVPSSRWPSETFTCNVAHPATNTKVDKPVA
KECECKCNCNNCPCPGCGLLGGPSVFIFPPKPKDILVTARTPTV
TCVVVDLDPENPEVQISWFVDSKQVQTANTQPREEQSNGTYRVV
SVLPIGHQDWLSGKQFKCKVNNKALPSPIEEIISKTPGQAHQPN
VYVLPPSRDEMSKNTVTLTCLVKDFFPPEIDVEWQSNGQQEPES
KYRMTPPQLDEDGSYFLYSKLSVDKSRWQRGDTFICAVMHEALH
NHYTQISLSHSPGK*

Figure 6

EVQLVESGGGLVQPGGSLRLSCAASGFTFDDYAMHWVRQAPGKG
LEWVSAITWNSGHIDYADSVEGRFTISRDNAKNSLYLQMNSLRA
EDTAVYYCAKVSYLSTASSLDYWGQGTLVTVSSASTTAPSVFPL
APSCGSTSGSTVALACLVSGYFPEPVTVSWNSGSLTSGVHTFPS
VLQSSGLYSLSSTVTVPSSRWPSETFTCNVVHPASNTKVDKPVP
KESTCKCISPCPVPESLGGPSVFIFPPKPKDILRITRTPEITCV
VLDLGREDPEVQISWFVDGKEVHTAKTQPREQQFNSTYRVVSVL
PIEHQDWLTGKEFKCRVNHIGLPSPIERTISKARGQAHQPSVYV
LPPSPKELSSSDTVTLTCLIKDFYPPEIDVEWQSNGQPEPESKY
HTTAPQLDEDGSYFLYSKLSVDKSRWQQGDTFTCAVMHEALQNH
YTDLSLSHSPGK*

Figure 7

DIQMTQSPSSLSASVGDRVTITCRASQGIRNYLAWYQQKPGKAP
KLLIYAASTLQSGVPSRFSGSGSGTDFTLTISSLQPEDVATYYC
QRYNRAPYTFGQGTKVEIKRNDAQPAVYLFQPSPDQLHTGSASV
VCLLNSFYPKDINVKWKVDGVIQDTGIQESVTEQDKDSTYSLSS
TLTMSSTEYLSHELYSCEITHKSLPSTLIKSFQRSECQRVD*

Figure 8

EVQLVESGGGLVQPGRSLRLSCAASGFTFDDYAMHWVRQAPGKG
LEWVSAITWNSGHIDYADSVEGRFTISRDNAKNSLYLQMNSLRA
EDTAVYYCAKVSYLSTASSLDYWGQGTLVTVSSASTTAPSVFPL
APSCGSTSGSTVALACLVSGYFPEPVTVSWNSGSLTSGVHTFPS
VLQSSGLYSLSSMVTVPSSRWPSETFTCNVAHPASKTKVDKPVP
KRENGRVPRPPDCPKCPAPEMLGGPSVFIFPPKPKDTLLIARTP
EVTCVVVDLDPEDPEVQISWFVDGKQMQTAKTQPREEQFNGTYR
VVSVLPIGHQDWLKGKQFTCKVNNKALPSPIERTISKARGQAHQ
PSVYVLPPSREELSKNTVSLTCLIKDFYPPDIDVEWQSNGQQEP
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LHNHYTQESLSHSPGK*

Figure 9

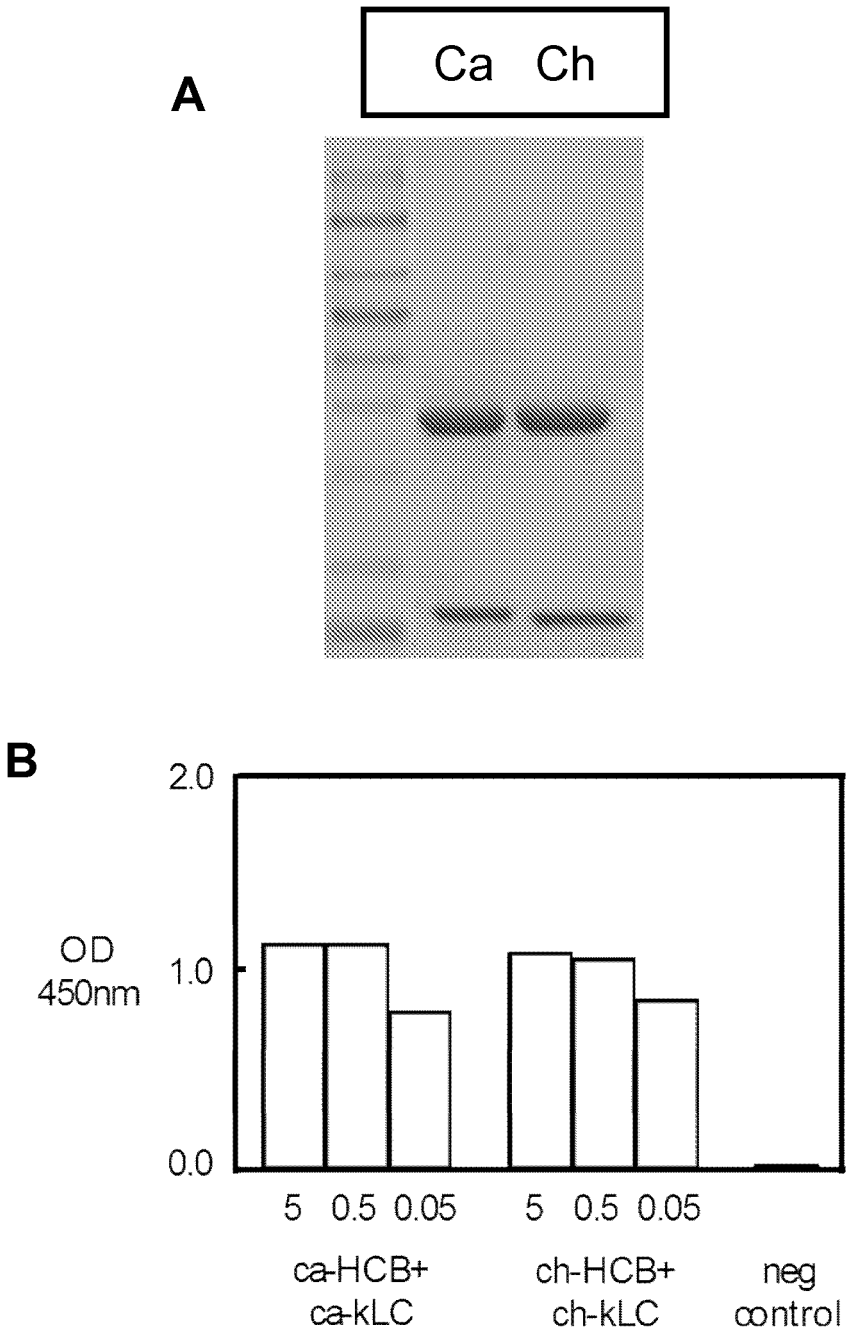

A
Ca Ch
B
2.0
1.0
0.0
OD
450nm
5 0.5 0.05
5 0.5 0.05
ca-HCB+
ca-kLC
ch-HCB+
ch-kLC
neg
control

Figure 10

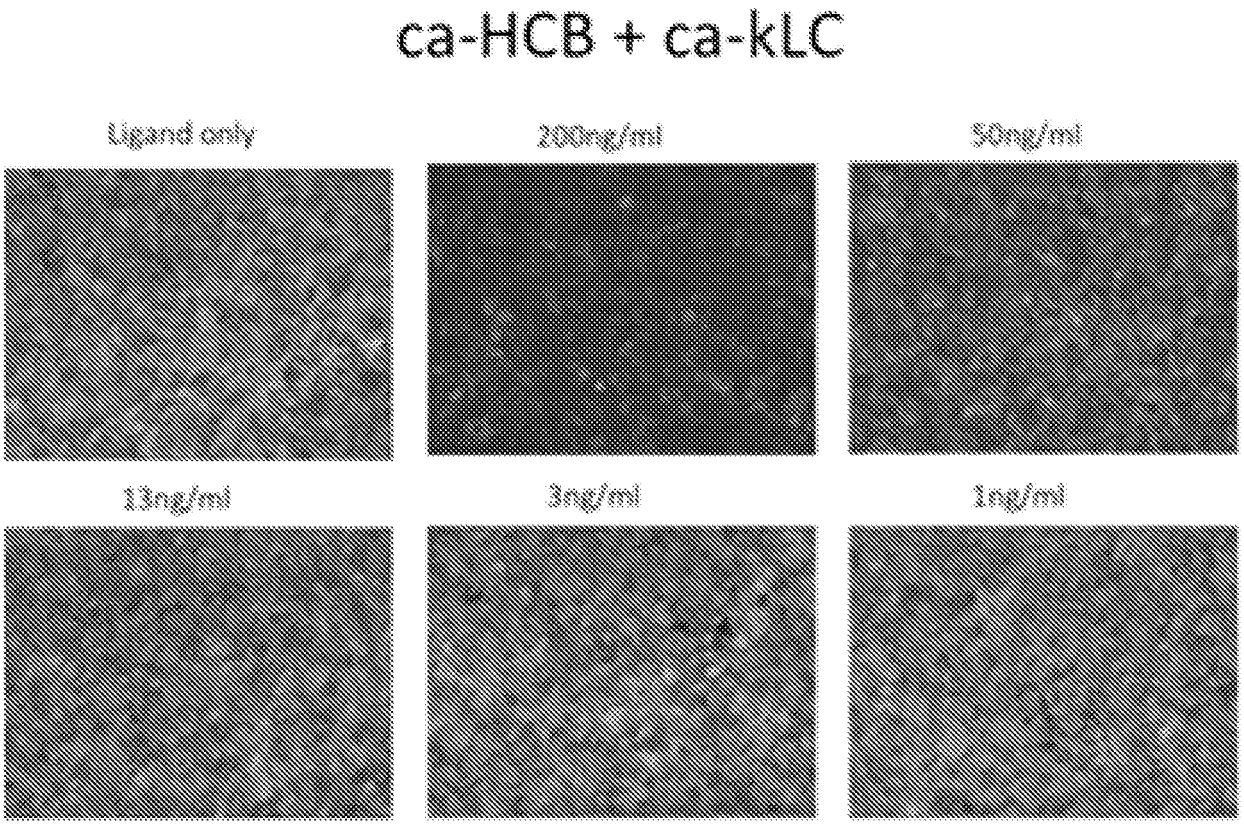


Figure 11(a)

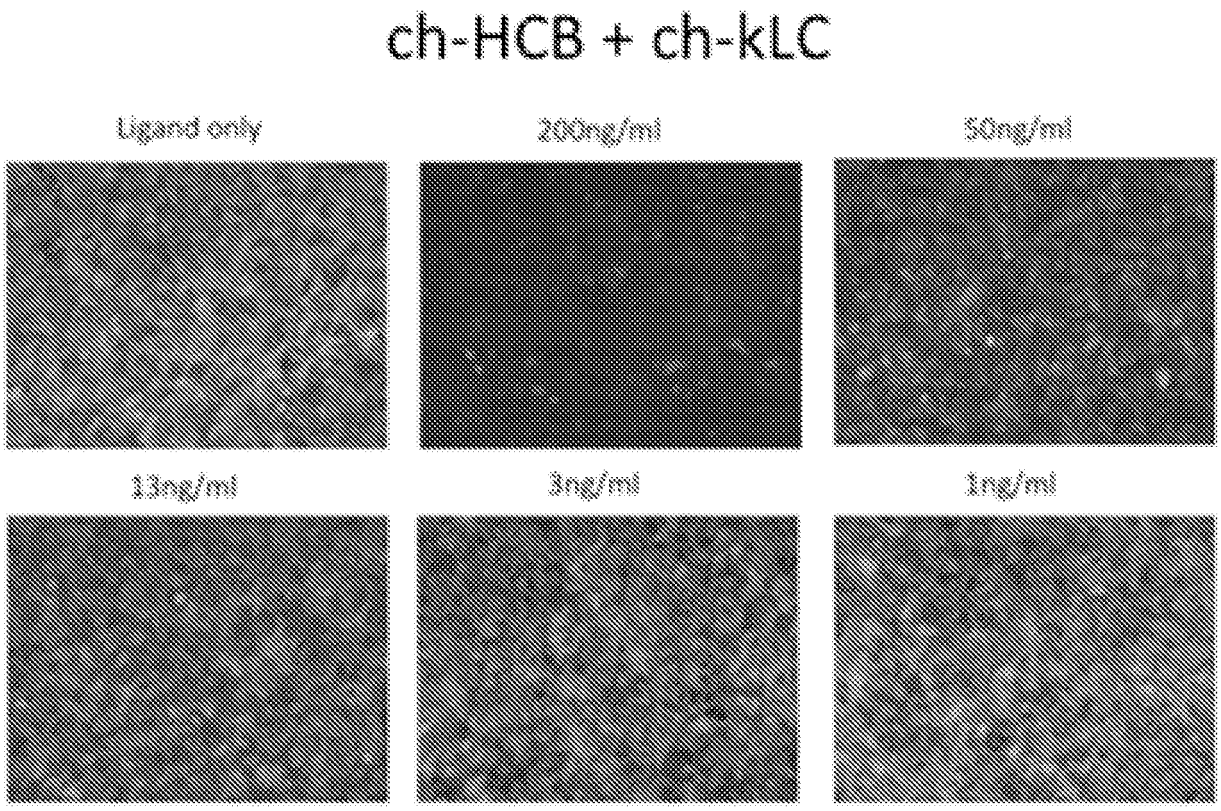


Figure 11(b)

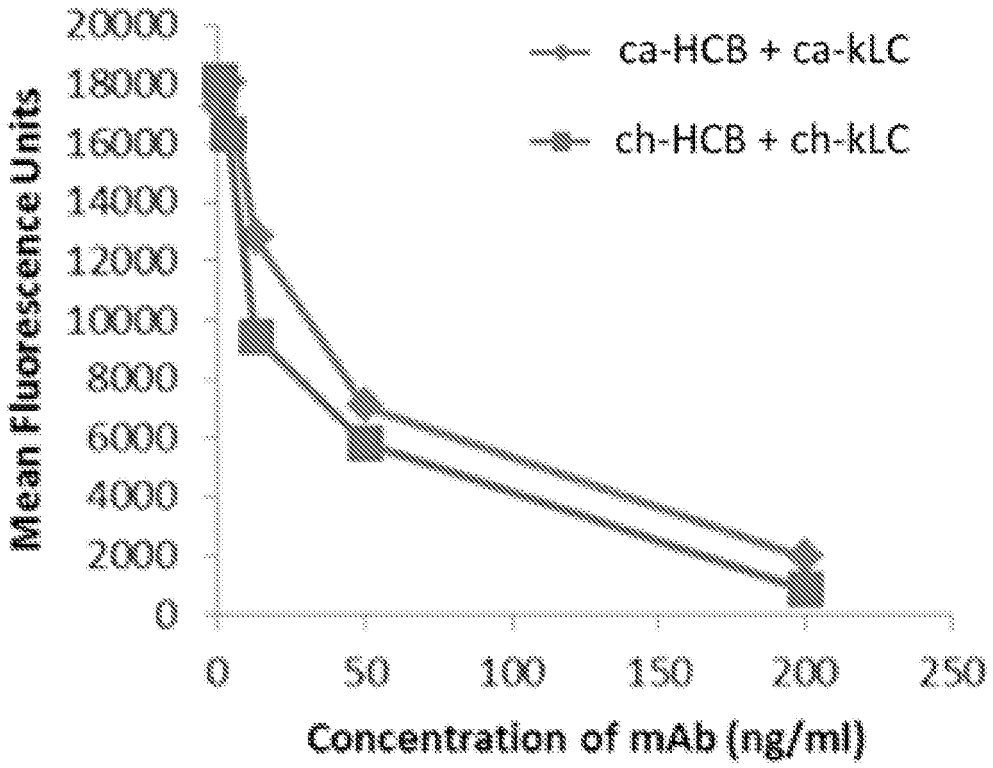

20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
Mean Fluorescence Units
0
50
100
150
200
250
Concentration of mAb (ng/ml)
ca-HCB + ca-kLC
ch-HCB + ch-kLC

Figure 11(c)

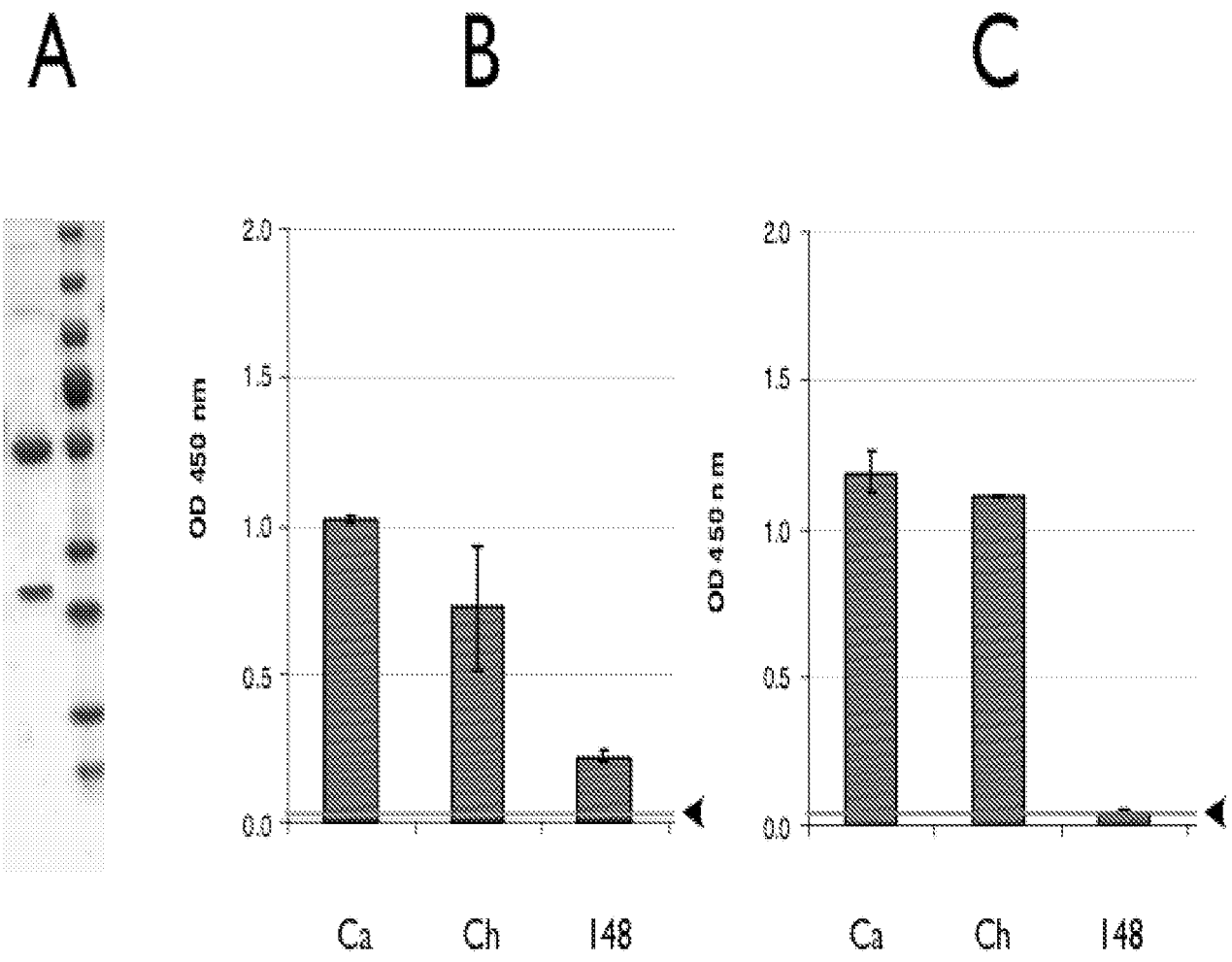

A
B
C
OD 450 nm
2.0
1.5
1.0
0.5
0.0
Ca
Ch
148
OD 450 nm
2.0
1.5
1.0
0.5
0.0
Ca
Ch
148

Figure 12(a)

MGFGLSWVFLVALLRGVQCEVQLVESGGGVVQPGGSLRLSCAASGFIFS
SYAMRWVRQAPGKGLEWVAFMSYDGSNKKYADSVKGRFTISRDNSKNTL
YLQMNSLRAEDTAVYYCARDRGIAAGGNYYYYGMDVWGQGTSVTVSSAS
TTAPSVFPLAPSCGSTSGSTVALACLVSGYFPEPVTVSWNSGSLTSGVH
TFPSVLQSSGLYSLSSMVTVPSSRWPSETFTCNVAHPASKTKVDKPVPK
RENGRVPRPPDCPKCPAPEMLGGPSVFIFPPKPKDTLLIARTPEVTCVV
VDLDPEDPEVQISWFVDGKQMQTAKTQPREEQFNGTYRVVSVLPIGHQD
WLKGKQFTCKVNNKALPSPIERTISKARGQAHQPSVYVLPPSREELSKN
TVSLTCLIKDFYPPDIDVEWQSNGQQEPESKYRTTPPQLDEDGSYFLYS
KLSVDKSRWQRGDTFICAVMHEALHNHYTQESLSHSPGK**

Figure 12(b)

MEAPAQLLFLLLLWLPDTTGEIVMTQSPASLSLSPGEKATISCRASQS
VYSYLAWYQQKPGQAPRLLIYDASNRATGVPSRFSGSGSGTDFTLTIS
SLEPEDVAVYYCQQPSNWPPFTFGPGTKVDIKRNDAQPAVYLFQPSPD
QLHTGSASVVCLLNSFYPKDINVKWKVDGVIQDTGIQESVTEQDKDST
YSLSSTLTMSSTEYLSHELYSCEITHKSLPSTLIKSFQRSECQRVD**

Figure 12(c)

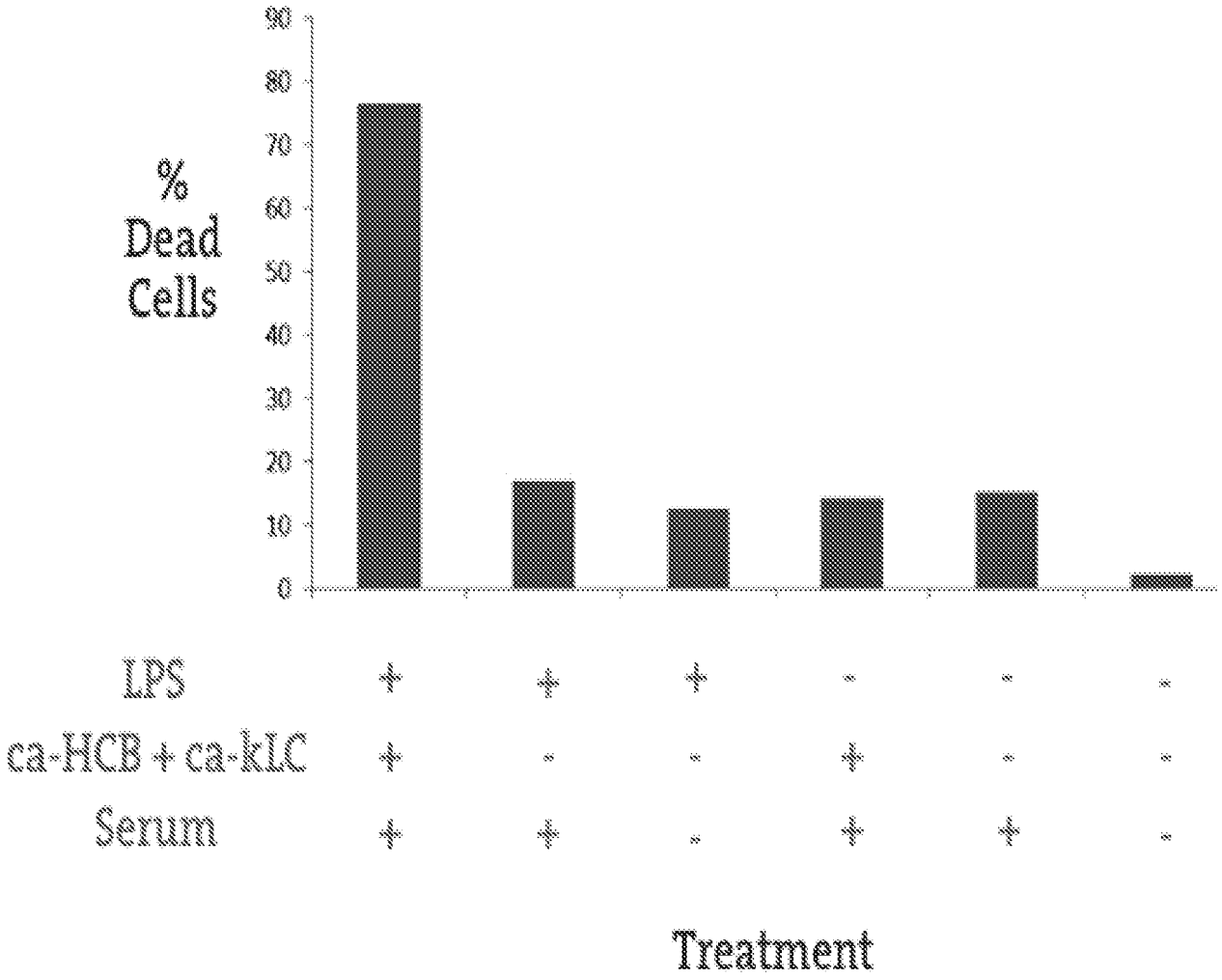

% Dead Cells
90
80
70
60
50
40
30
20
10
0
LPS + + + - - -
ca-HCB + ca-kLC + - - + - -
Serum + + - + + -
Treatment

Figure 13