Cholix^{415}-TEV-IL-10 Fusion Molecule

MVEEALNIFD ECRSPCSLTP EPGKPIQSKL SIPGDVVLDE GVLYYSMTIN DEQNDIKDED KGESIITIGE
FATVRATRHY VSQDAPFGVI NLDITTENGT KTYSFNRKES EFAINWLVPI GEDSPASIKI SIDELDQQRN
IIEVPKLYSI DLDNQTLEQW KTQGNVSFSV TRPEHNIAIS WPSVSYKAAQ KEGSRHKRWA HWHTGLALCW
LVPIDAIYNY ITQQNCTLGD NWFGGSYETV AGTPKAITVK QGIEQKPVEQ RIHFSKKNAM EALAAHRVCG
VPLETLARSR KPRDLPDDLS CAYNAQQIVS LFLATRILFT HIDSIFTLNL DGQEPEVAER LDDLRRINEN
NPGMVIQVLT VARQIYNDYV THHPGLTPEQ TSAGAQAADI LSLFCPDADK SCVASNSDQA NINIES**GGGG**
SGGGENLYFQ SPGQGTQSEN SCTHFPGNLP NMLRDLRDAF SRVKTFFQMK DQLDNLLLKE SLLEDFKGYL
GCQALSEMIQ FYLEEVMPQA ENQDPDIKAH VNSLGENLKT LRLRLRRCHR FLPCENKSKA VEQVKNAFNK
LQEKGIYKAM SEFDIFINYI EAYMTMKIRN (SEQ ID NO: 122)

Cholix^{415}-$(G_4S)_3$-IL-10 Fusion Molecule

MVEEALNIFD ECRSPCSLTP EPGKPIQSKL SIPGDVVLDE GVLYYSMTIN DEQNDIKDED KGESIITIGE
FATVRATRHY VSQDAPFGVI NLDITTENGT KTYSFNRKES EFAINWLVPI GEDSPASIKI SIDELDQQRN
IIEVPKLYSI DLDNQTLEQW KTQGNVSFSV TRPEHNIAIS WPSVSYKAAQ KEGSRHKRWA HWHTGLALCW
LVPIDAIYNY ITQQNCTLGD NWFGGSYETV AGTPKAITVK QGIEQKPVEQ RIHFSKKNAM EALAAHRVCG
VPLETLARSR KPRDLPDDLS CAYNAQQIVS LFLATRILFT HIDSIFTLNL DGQEPEVAER LDDLRRINEN
NPGMVIQVLT VARQIYNDYV THHPGLTPEQ TSAGAQAADI LSLFCPDADK SCVASNSDQA NINIES**GGGG**
SGGGGSGGGG SPGQGTQSEN SCTHFPGNLP NMLRDLRDAF SRVKTFFQMK DQLDNLLLKE SLLEDFKGYL
GCQALSEMIQ FYLEEVMPQA ENQDPDIKAH VNSLGENLKT LRLRLRRCHR FLPCENKSKA VEQVKNAFNK
LQEKGIYKAM SEFDIFINYI EAYMTMKIRN (SEQ ID NO: 123)

FIG. 1

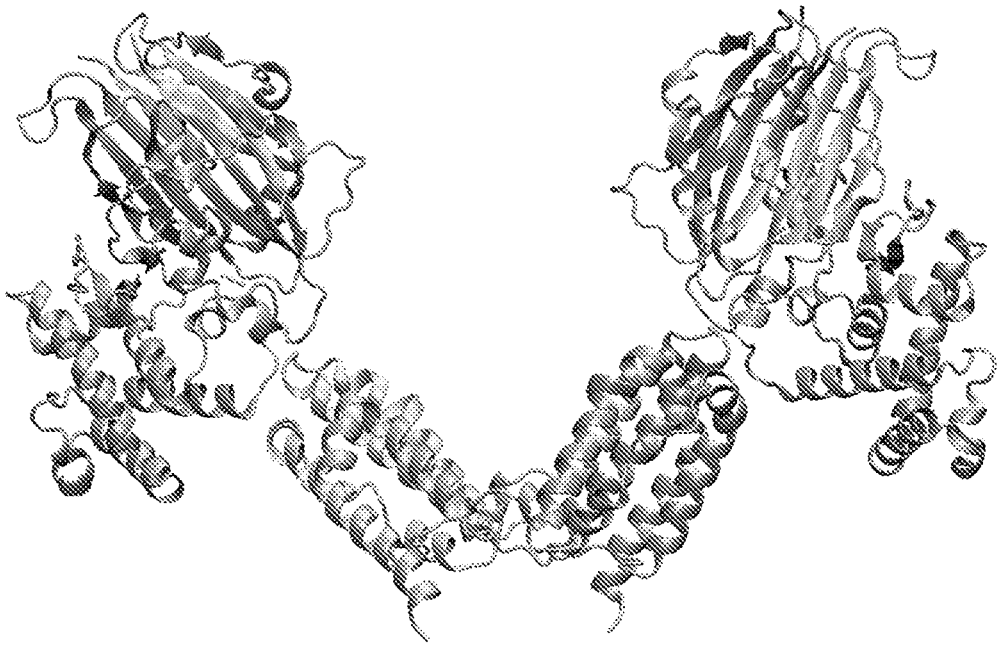


FIG. 2

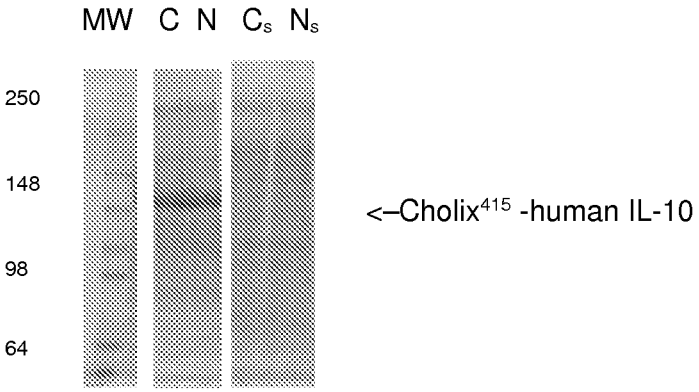


FIG. 3

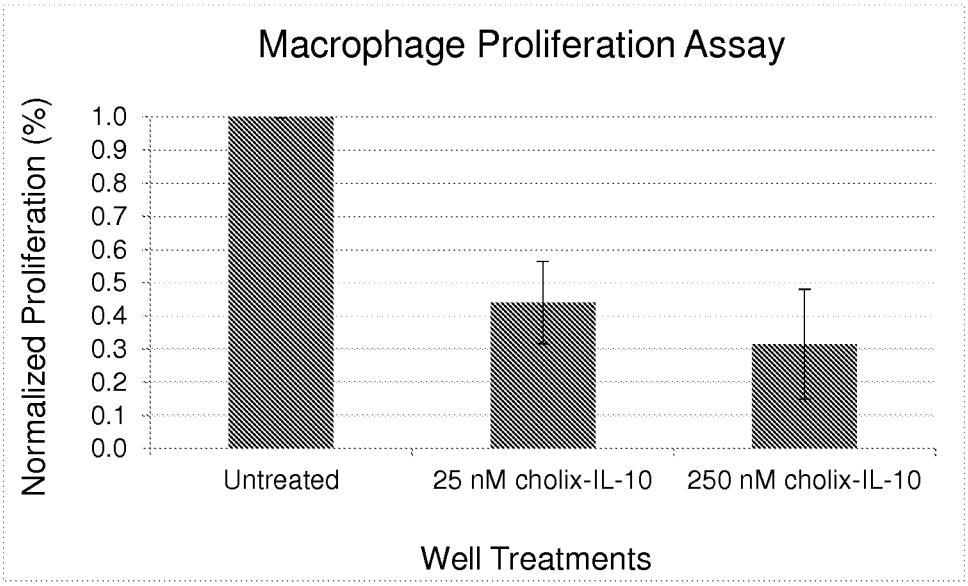

Macrophage Proliferation Assay
Normalized Proliferation (%)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Untreated
25 nM cholix-IL-10
250 nM cholix-IL-10
Well Treatments

FIG. 4

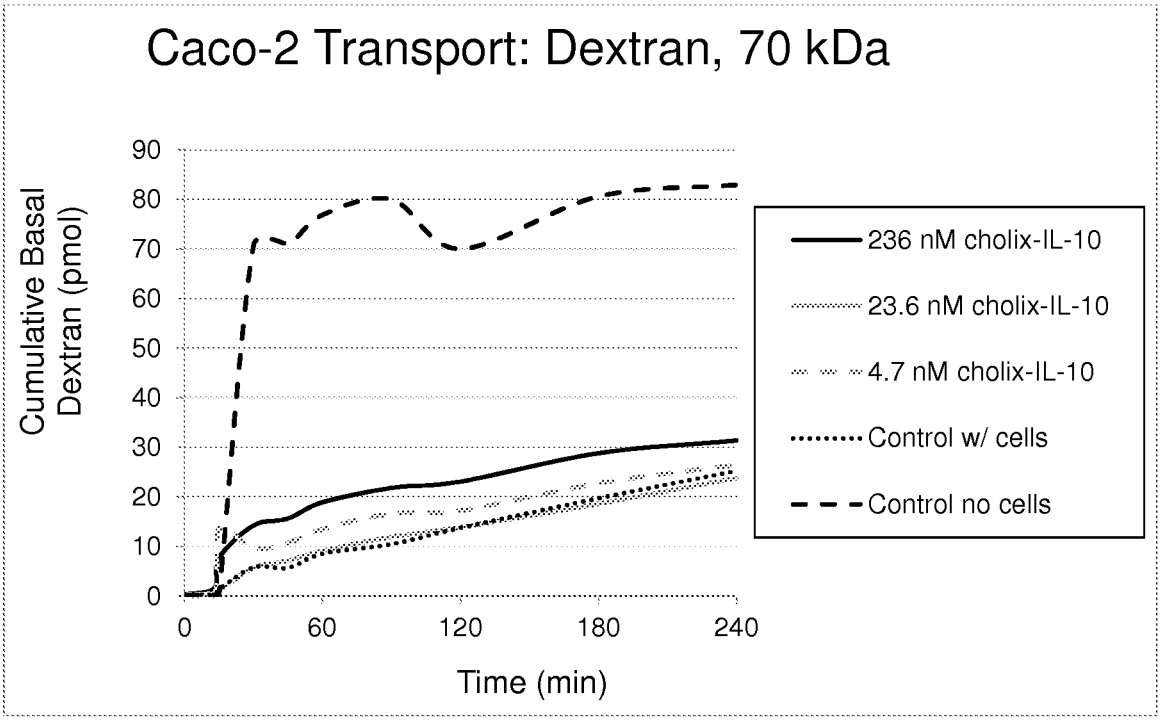

Caco-2 Transport: Dextran, 70 kDa
Cumulative Basal Dextran (pmol)
90
80
70
60
50
40
30
20
10
0
0
60
120
180
240
Time (min)
236 nM cholix-IL-10
23.6 nM cholix-IL-10
4.7 nM cholix-IL-10
Control w/ cells
Control no cells

FIG. 5

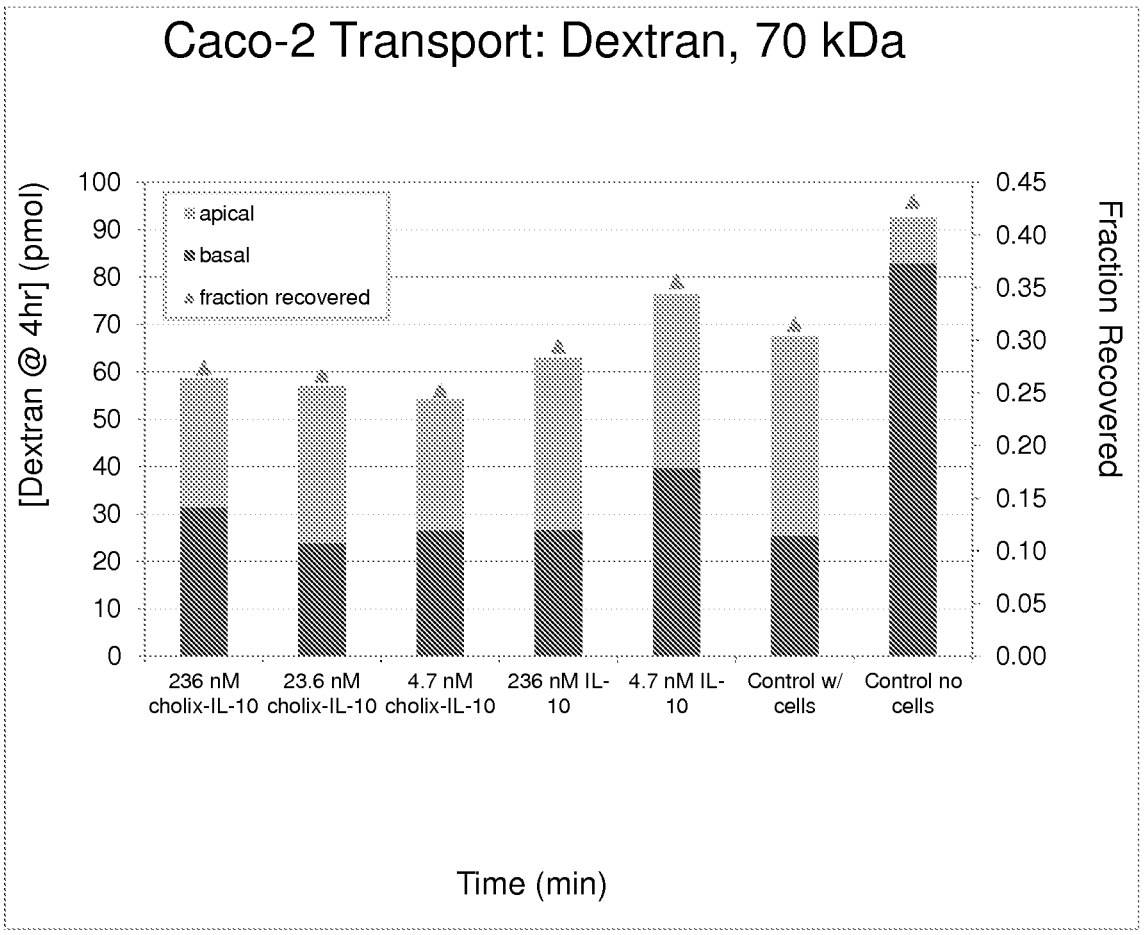
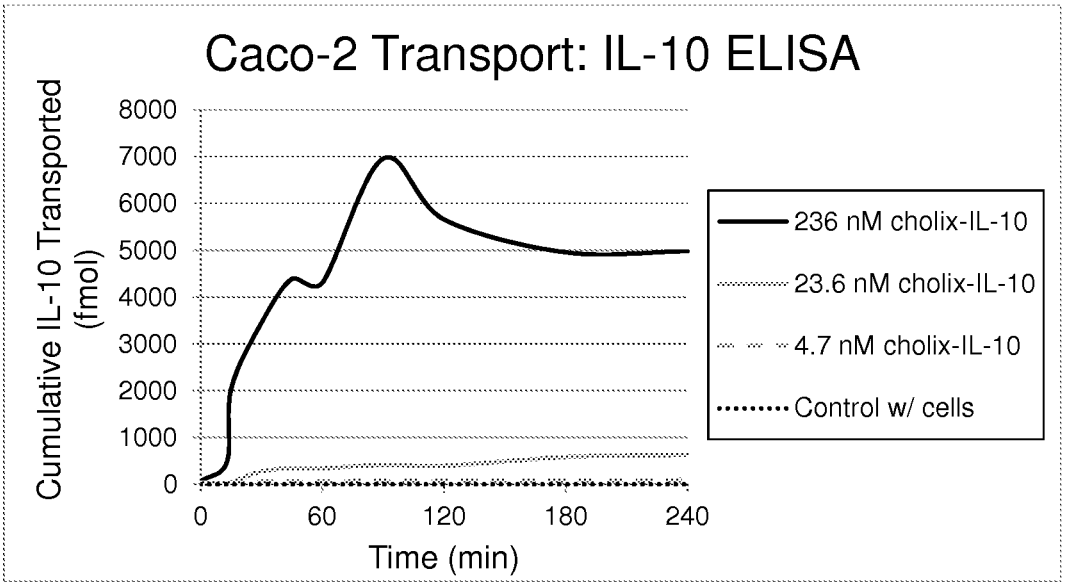

Caco-2 Transport: Dextran, 70 kDa
[Dextran @ 4hr] (pmol)
Fraction Recovered
apical
basal
fraction recovered
100
90
80
70
60
50
40
30
20
10
0
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
236 nM cholix-IL-10
23.6 nM cholix-IL-10
4.7 nM cholix-IL-10
236 nM IL-10
4.7 nM IL-10
Control w/ cells
Control no cells
Time (min)

FIG. 6

A


Caco-2 Transport: IL-10 ELISA
Cumulative IL-10 Transported (fmol)
8000
7000
6000
5000
4000
3000
2000
1000
0
0
60
120
180
240
Time (min)
236 nM cholix-IL-10
23.6 nM cholix-IL-10
4.7 nM cholix-IL-10
Control w/ cells

B

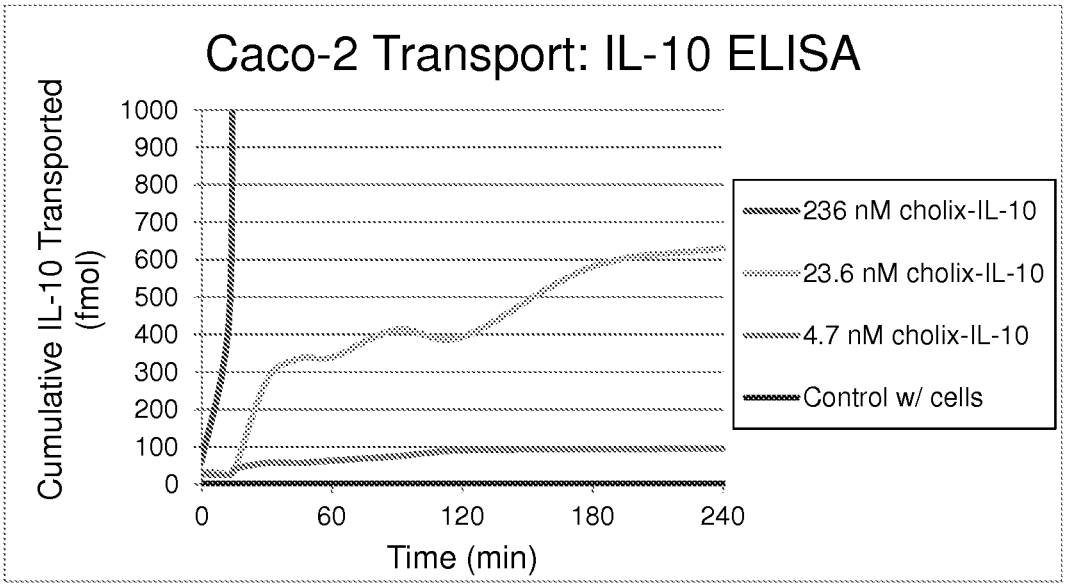

Caco-2 Transport: IL-10 ELISA
Cumulative IL-10 Transported (fmol)
1000
900
800
700
600
500
400
300
200
100
0
0
60
120
180
240
Time (min)
236 nM cholix-IL-10
23.6 nM cholix-IL-10
4.7 nM cholix-IL-10
Control w/ cells

FIG. 7