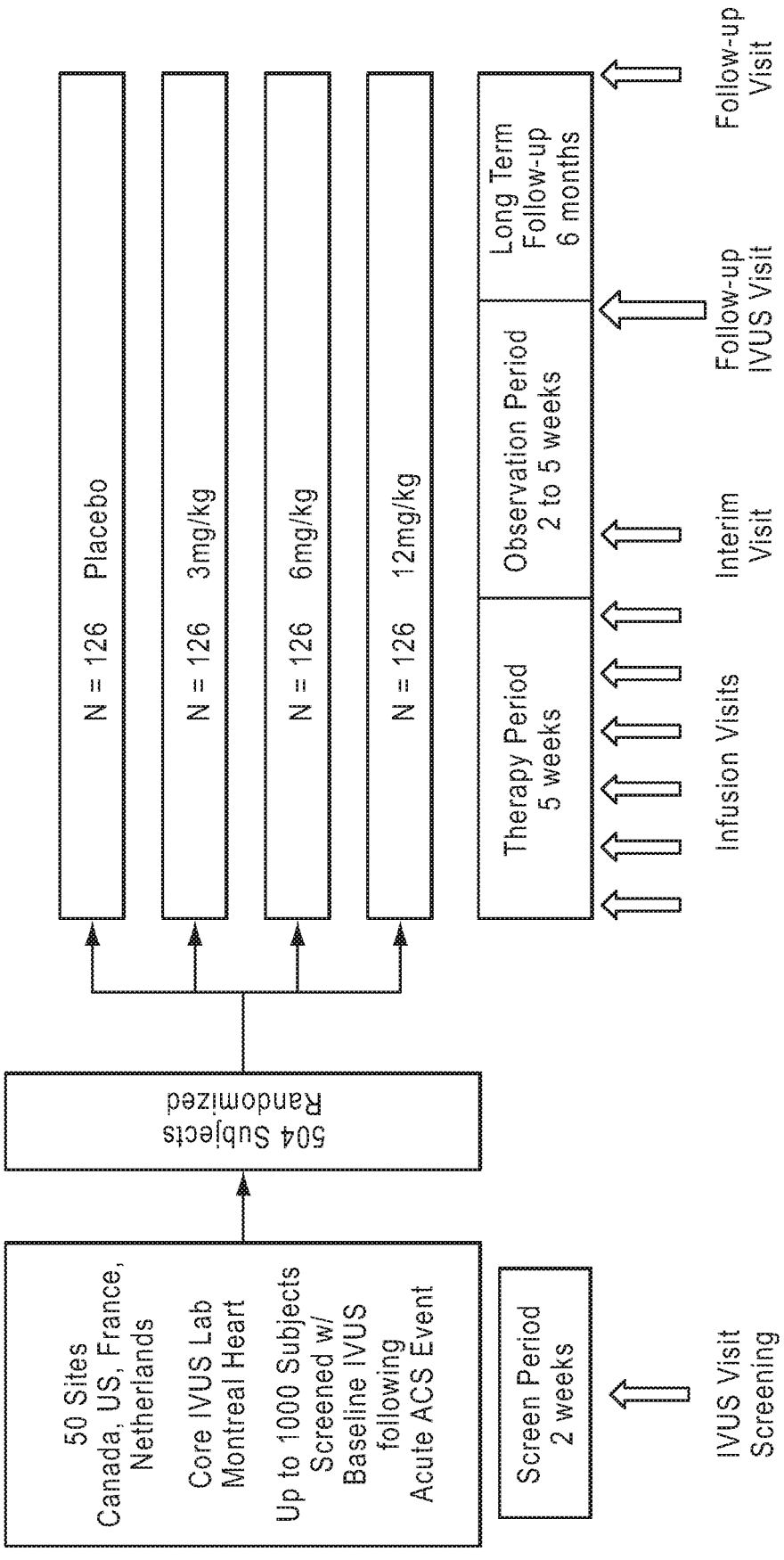

50 Sites
Canada, US, France, Netherlands
Core IVUS Lab
Montreal Heart
Up to 1000 Subjects Screened w/ Baseline IVUS following Acute ACS Event
Screen Period
2 weeks
IVUS Visit
Screening
504 Subjects
Randomized
N = 126 Placebo
N = 126 3mg/kg
N = 126 6mg/kg
N = 126 12mg/kg
Therapy Period
5 weeks
Observation Period
2 to 5 weeks
Long Term
Follow-up
6 months
Infusion Visits
Interim
Visit
Follow-up
IVUS Visit
Follow-up
Visit

FIG. 1

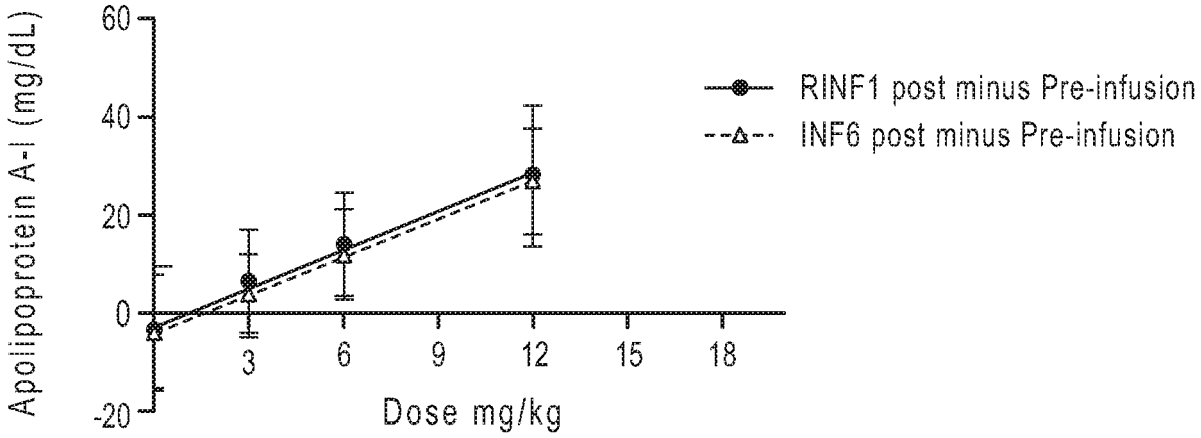


FIG. 2A

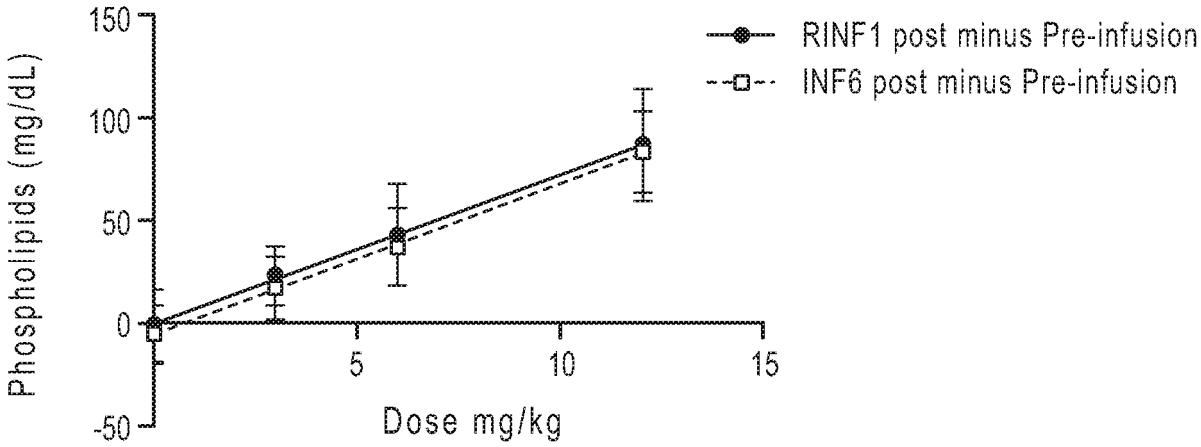


FIG. 2B

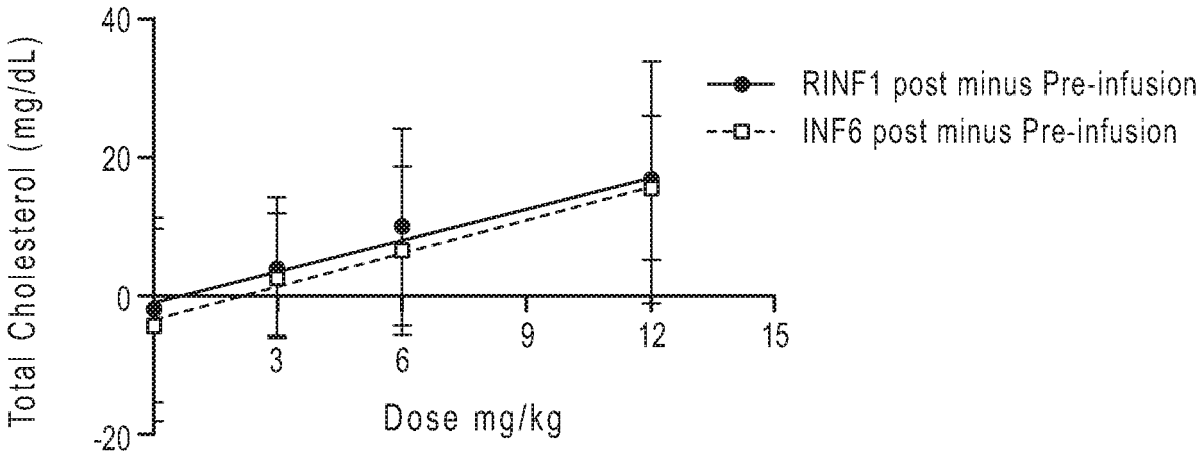


FIG. 2C

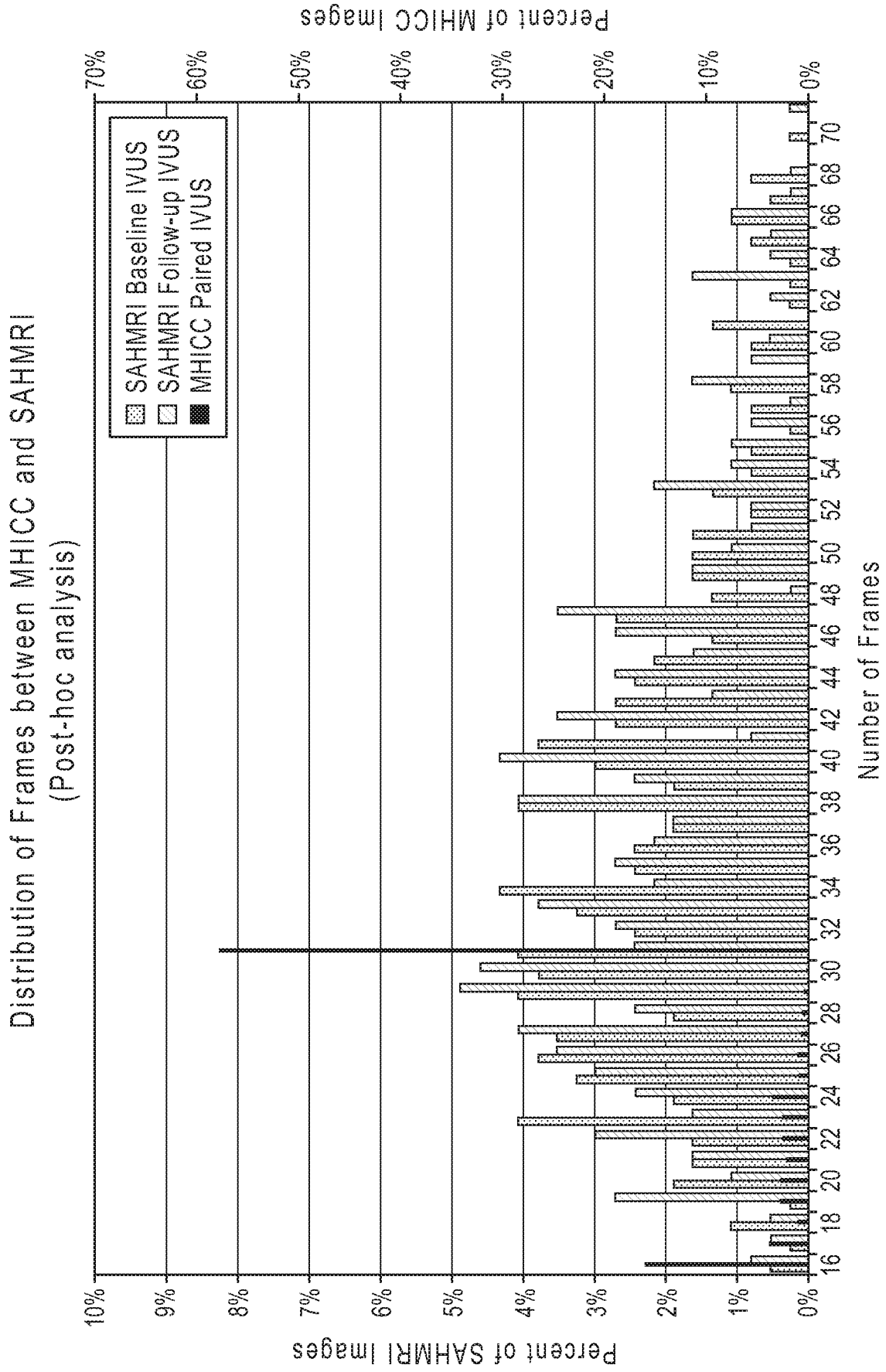

Distribution of Frames between MHICC and SAHMRI
(Post-hoc analysis)
SAHMRI Baseline IVUS
SAHMRI Follow-up IVUS
MHICC Paired IVUS
Percent of SAHMRI Images
Percent of MHICC Images
Number of Frames

FIG. 3

LS Mean Change in TAV and PAV mITT Population

Parameter	Placebo N=93	3 mg/kg N=88	6 mg/kg N=100	12 mg/kg N=88
Baseline TAV (mm^3) (median)	143.8 (102, 185)	122.7 (96, 161)	137.1 (107, 178)	146.0 (97, 176)
Change TAV (mm^3)	-2.85	-4.76	-3.33	-2.61
p-value compared with baseline	0.02	<0.001	0.005	0.04
p-value compared with placebo (RNK)		0.09	0.40	0.99
Parameter	Placebo N=93	3 mg/kg N=88	6 mg/kg N=100	12 mg/kg N=88
Baseline PAV (%) (median)	36.1 (29.8, 42.1)	33.5 (28.7, 39.6)	37.6 (30.5, 42.1)	36.2 (29.7, 42.9)
Change PAV	-0.17	-0.56	-0.41	+0.22
p-value compared with baseline	0.51	0.03	0.09	0.39
p-value compared with placebo (RNK)		0.12	0.31	0.52

FIG. 4

LS Mean Change in TAV and PAV mPP Population

Parameter	Placebo N=75	3 mg/kg N=73	6 mg/kg N=77	12 mg/kg N=70
Baseline TAV (mm^3) (median)	151.9 (106.9, 189.8)	122.4 (96.7, 160.3)	136.7 (105.7, 170.2)	146.0 (99.3, 167.4)
Change TAV (mm^3)	-3.21	-5.64	-3.03	-1.75
p-value compared with baseline	0.02	<0.001	0.02	0.20
p-value compared with placebo (RNK)		0.04	0.45	0.70
Parameter	Placebo N=75	3 mg/kg N=73	6 mg/kg N=77	12 mg/kg N=70
Baseline PAV (%) (median)	37.2 (30.4, 42.4)	34.2 (28.9, 39.6)	37.6 (30.1, 43)	36.8 (29.4, 42.9)
Change PAV	-0.13	-0.69	-0.32	+0.34
p-value compared with baseline	0.65	0.02	0.24	0.25
p-value compared with placebo (RNK)		0.05	0.27	0.47

FIG. 5

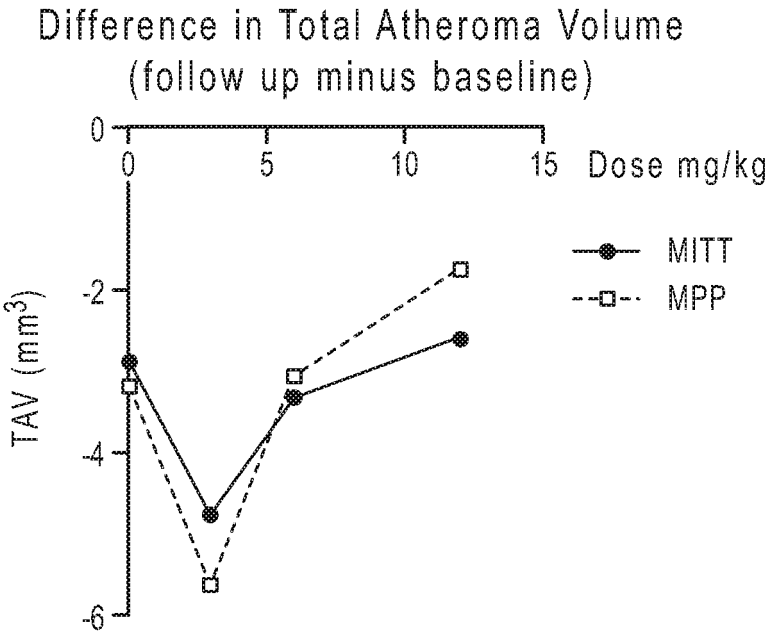

Difference in Total Atheroma Volume
(follow up minus baseline)
0
0
5
10
15
Dose mg/kg
MITT
MPP
-2
-4
-6
TAV (mm3)

FIG. 6A

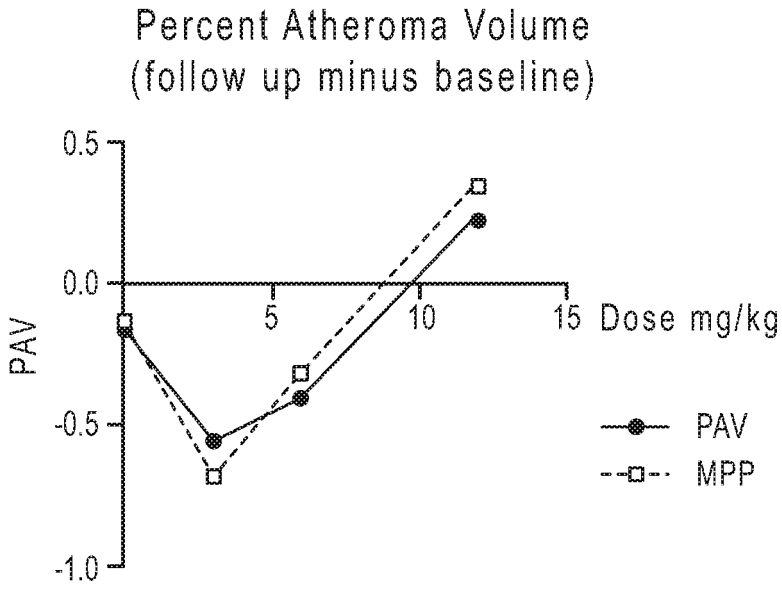

Percent Atheroma Volume
(follow up minus baseline)
0.5
0.0
-0.5
-1.0
5
10
15
Dose mg/kg
PAV
PAV
MPP

FIG. 6B

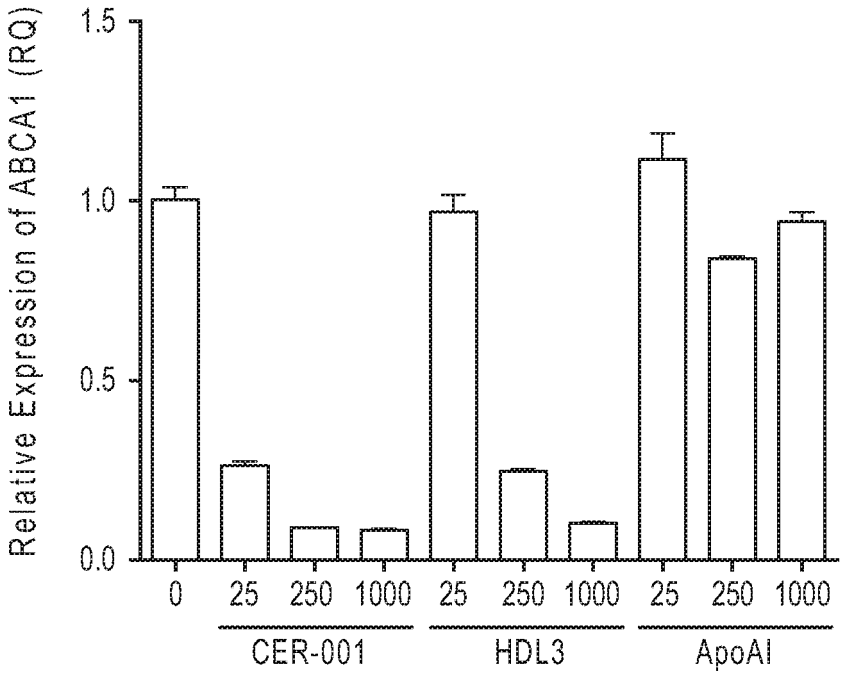

Relative Expression of ABCA1 (RQ)
1.5
1.0
0.5
0.0
0
25
250
1000
25
250
1000
25
250
1000
CER-001
HDL3
ApoAI

FIG. 7

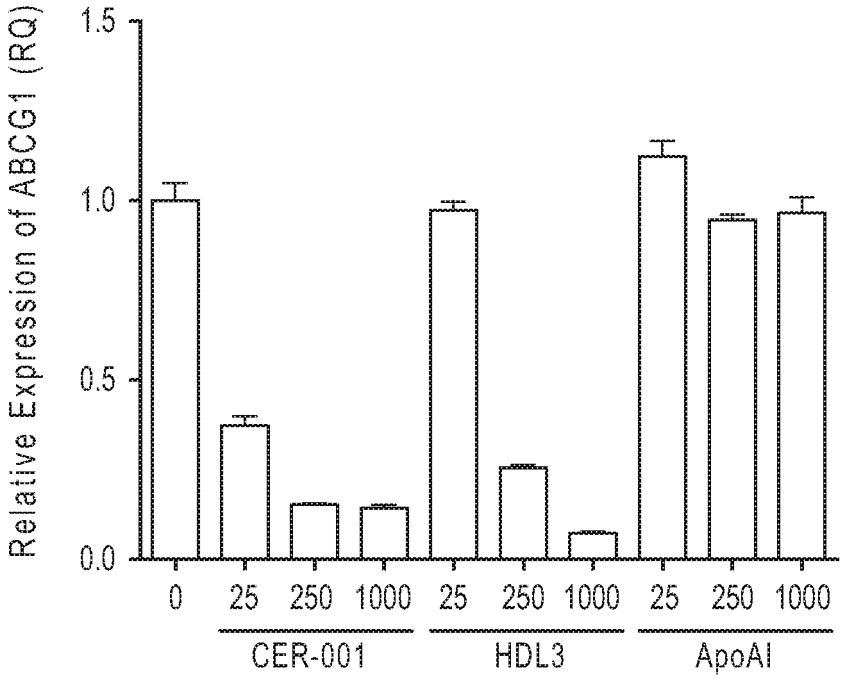

Relative Expression of ABCG1 (RQ)
1.5
1.0
0.5
0.0
0
25
250
1000
25
250
1000
25
250
1000
CER-001
HDL3
ApoAI

FIG. 8

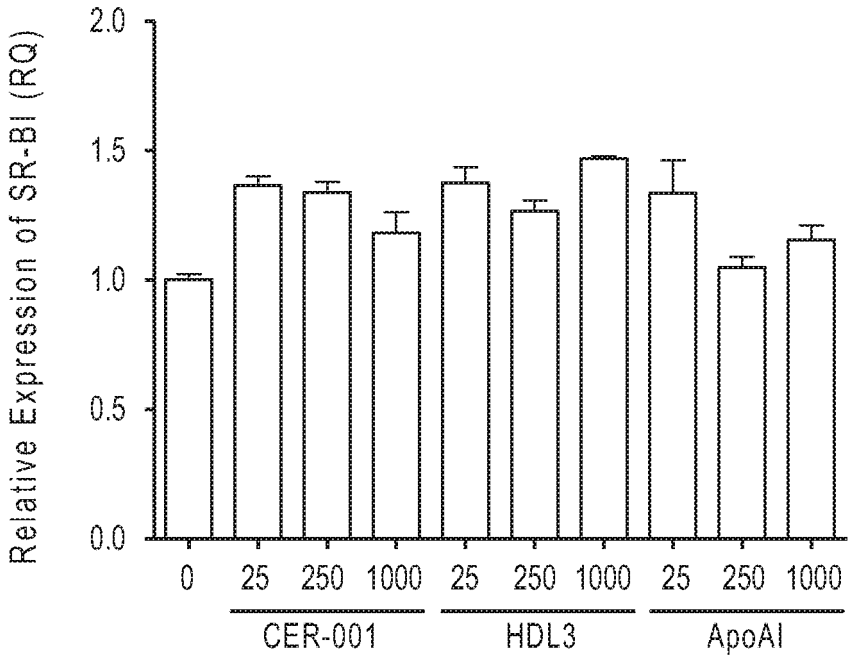

Relative Expression of SR-BI (RQ)
2.0
1.5
1.0
0.5
0.0
0
25
250
1000
25
250
1000
25
250
1000
CER-001
HDL3
ApoAI

FIG. 9

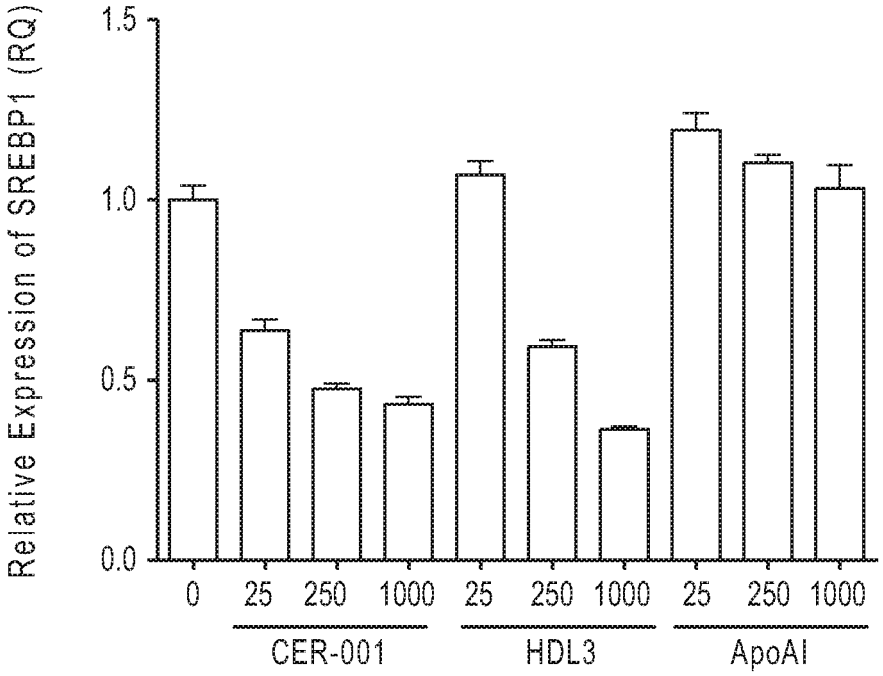

Relative Expression of SREBP1 (RQ)
1.5
1.0
0.5
0.0
0
25
250
1000
25
250
1000
25
250
1000
CER-001
HDL3
ApoAI

FIG. 10

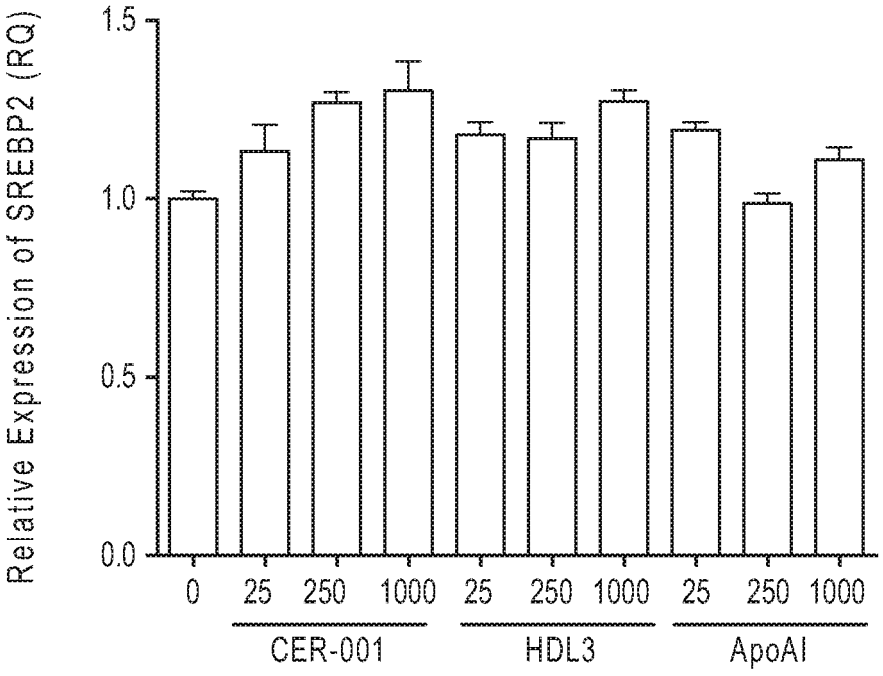

Relative Expression of SREBP2 (RQ)
1.5
1.0
0.5
0.0
0
25
250
1000
25
250
1000
25
250
1000
CER-001
HDL3
ApoAI

FIG. 11

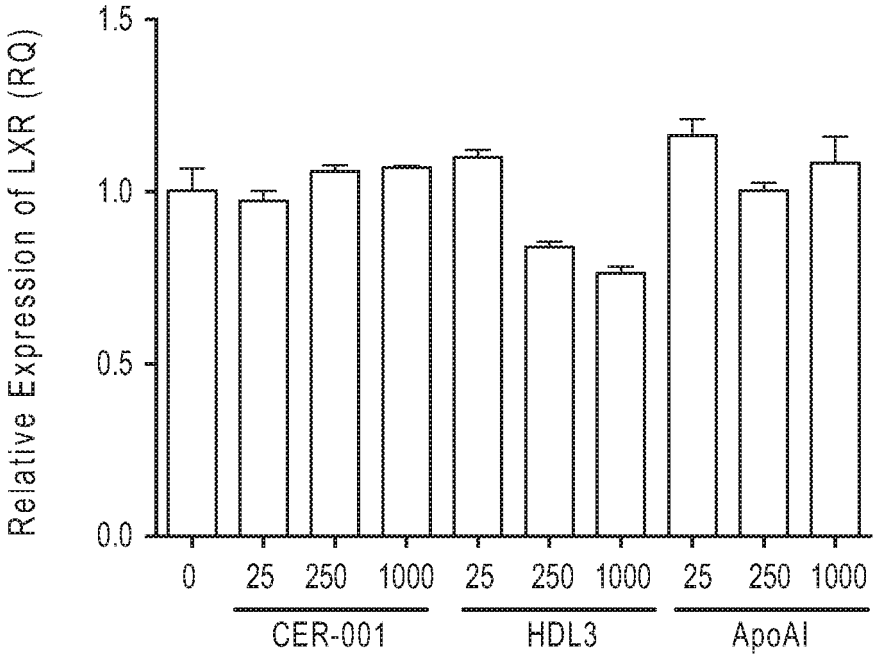

Relative Expression of LXR (RQ)
1.5
1.0
0.5
0.0
0
25
250
1000
25
250
1000
25
250
1000
CER-001
HDL3
ApoAI

FIG. 12

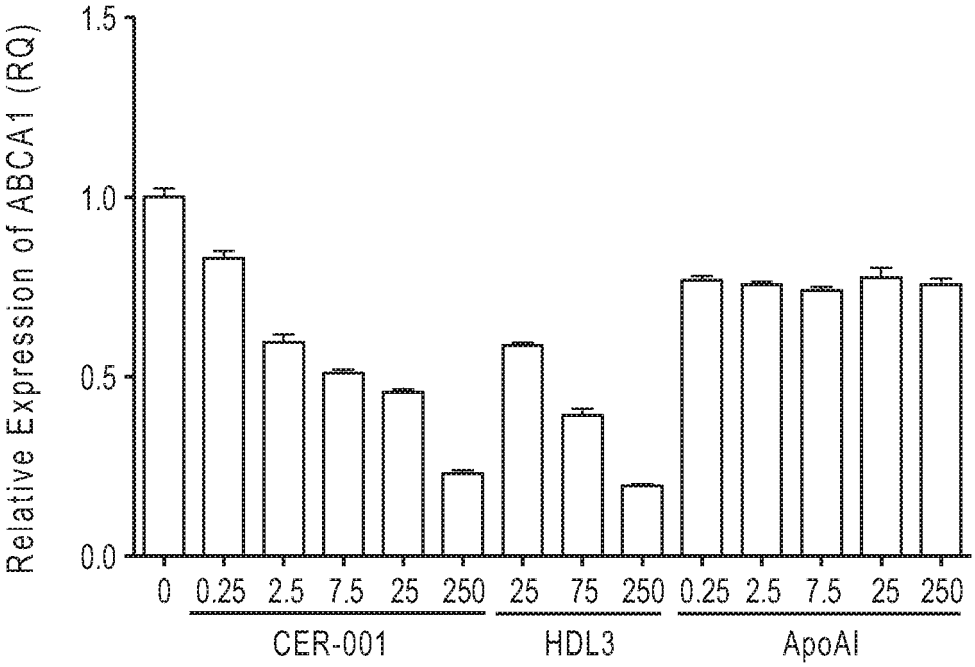

Relative Expression of ABCA1 (RQ)
1.5
1.0
0.5
0.0
0
0.25
2.5
7.5
25
250
25
75
250
0.25
2.5
7.5
25
250
CER-001
HDL3
ApoAI

FIG. 13

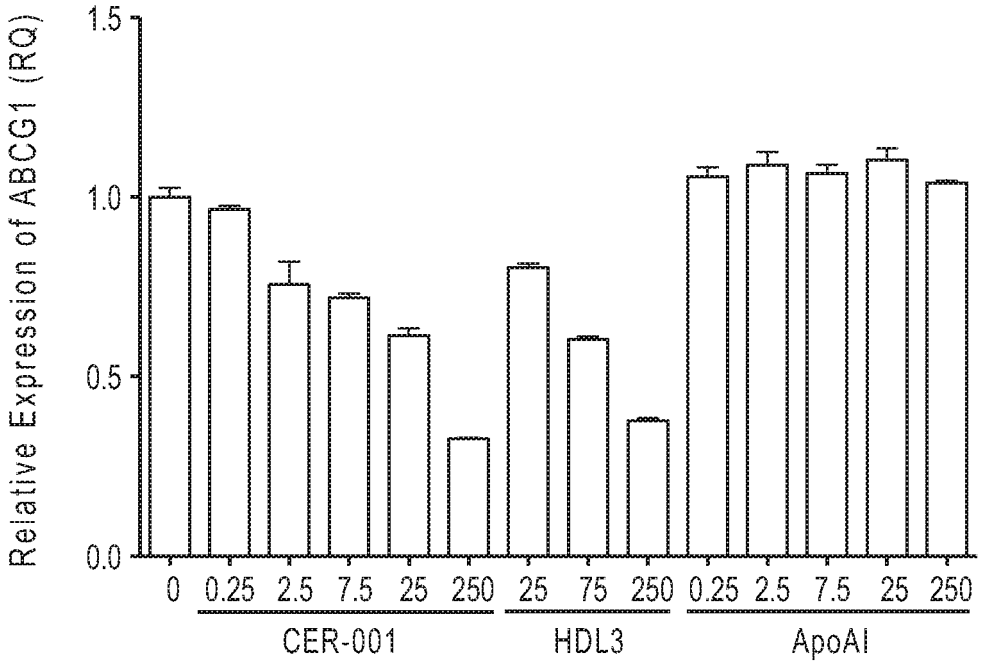

Relative Expression of ABCG1 (RQ)
1.5
1.0
0.5
0.0
0
0.25
2.5
7.5
25
250
25
75
250
0.25
2.5
7.5
25
250
CER-001
HDL3
ApoAI

FIG. 14

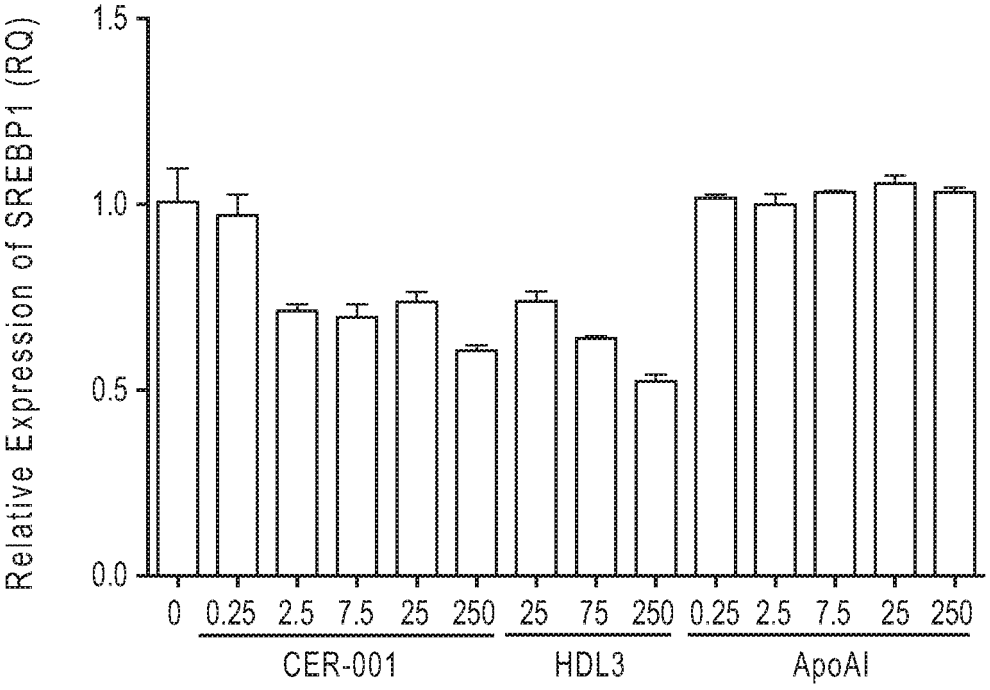

Relative Expression of SREBP1 (RQ)
1.5
1.0
0.5
0.0
0
0.25
2.5
7.5
25
250
25
75
250
0.25
2.5
7.5
25
250
CER-001
HDL3
ApoAI

FIG. 15

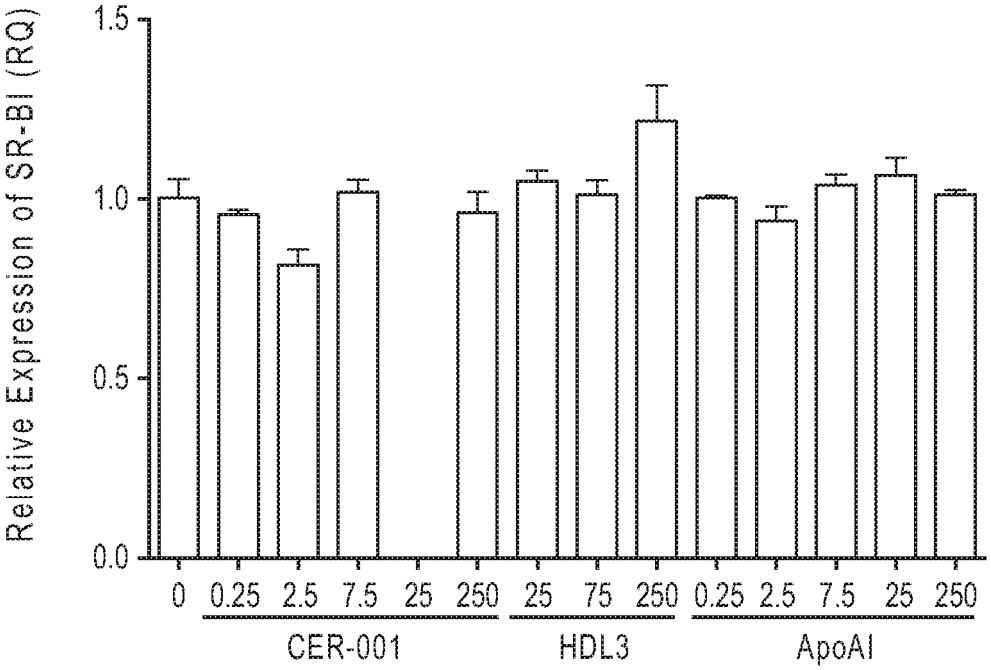

Relative Expression of SR-BI (RQ)
1.5
1.0
0.5
0.0
0
0.25
2.5
7.5
25
250
25
75
250
0.25
2.5
7.5
25
250
CER-001
HDL3
ApoAI

FIG. 16

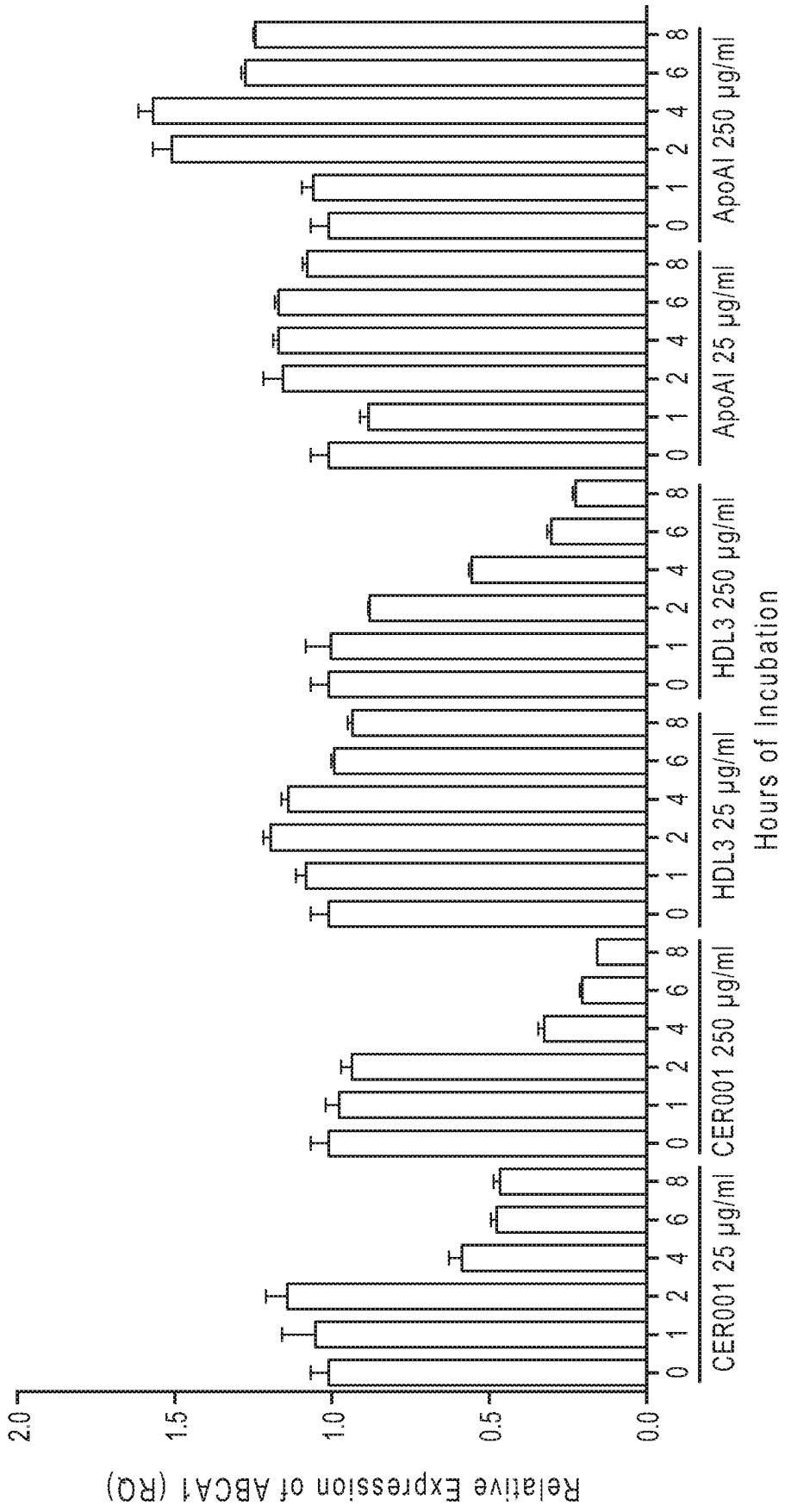

Relative Expression of ABCA1 (RQ)
2.0
1.5
1.0
0.5
0.0
0 1 2 4 6 8 0 1 2 4 6 8 0 1 2 4 6 8 0 1 2 4 6 8
CER001 25 µg/ml
CER001 250 µg/ml
HDL3 25 µg/ml
HDL3 250 µg/ml
ApoAI 25 µg/ml
ApoAI 250 µg/ml
Hours of Incubation

FIG. 17

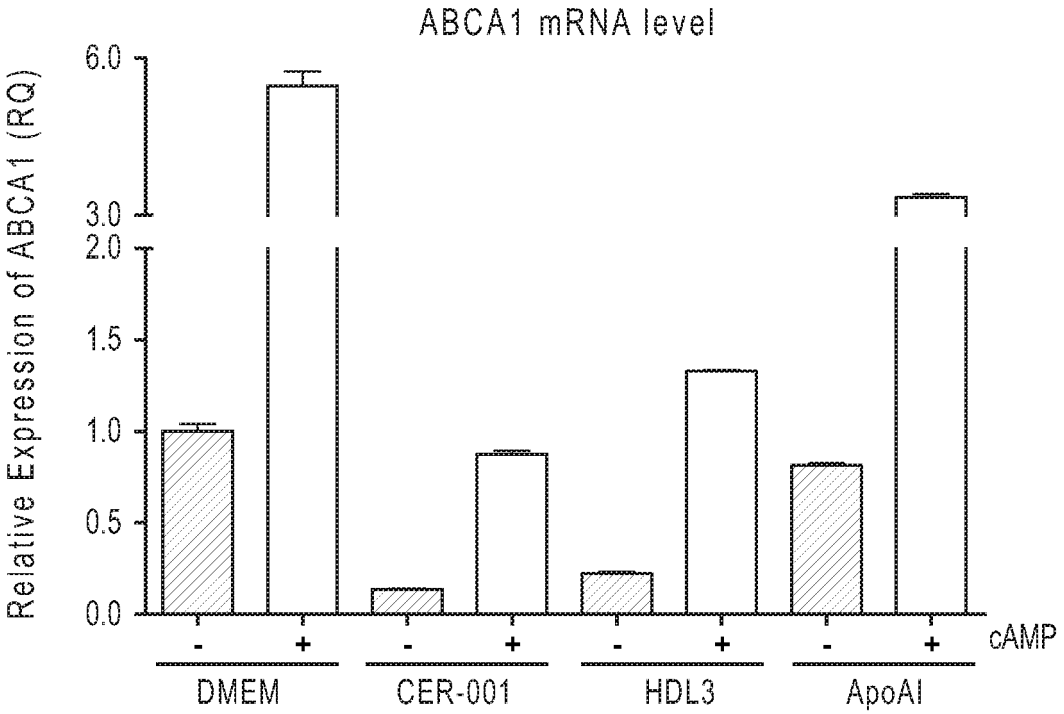

ABCA1 mRNA level
Relative Expression of ABCA1 (RQ)
6.0
3.0
2.0
1.5
1.0
0.5
0.0
- + - + - + - +
cAMP
DMEM
CER-001
HDL3
ApoAI

FIG. 18

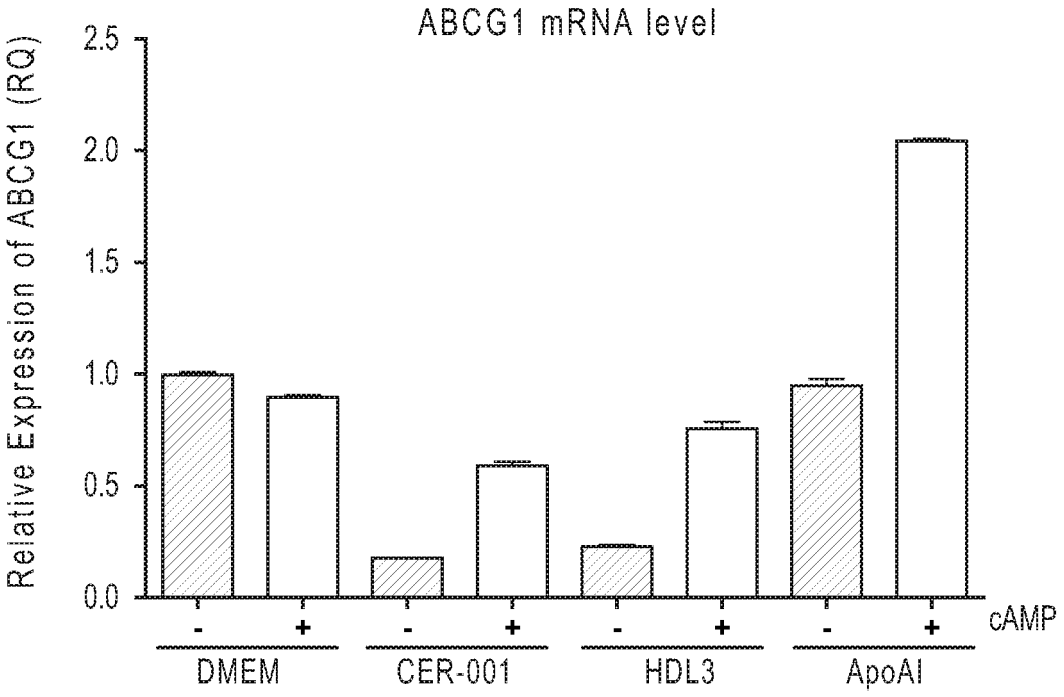

ABCG1 mRNA level
Relative Expression of ABCG1 (RQ)
2.5
2.0
1.5
1.0
0.5
0.0
- + - + - + - +
cAMP
DMEM
CER-001
HDL3
ApoAI

FIG. 19

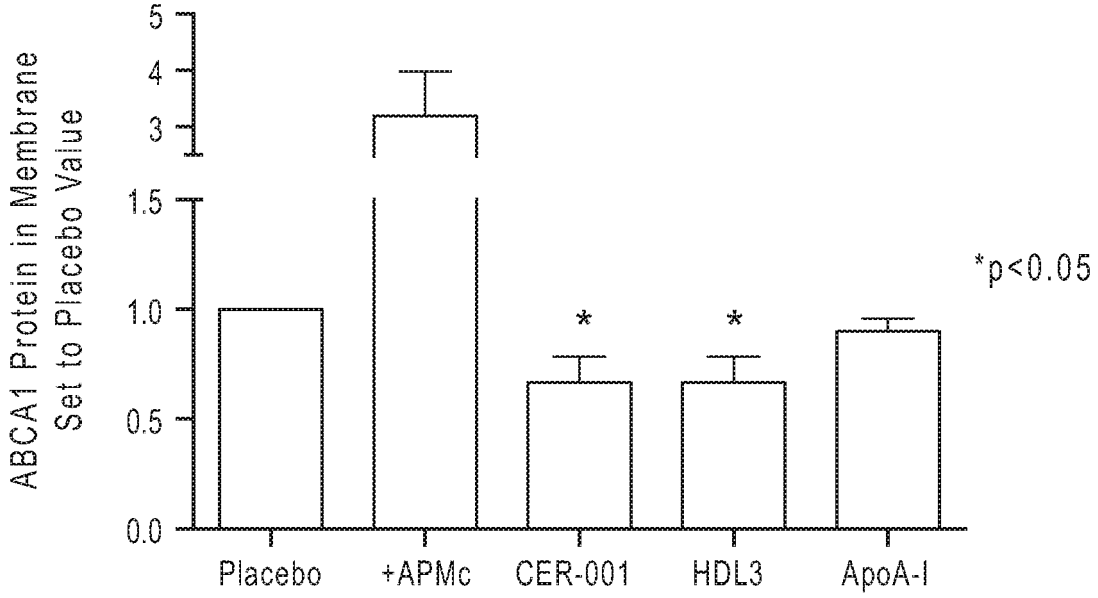

ABCA1 Protein in Membrane
Set to Placebo Value
5
4
3
1.5
1.0
0.5
0.0
*
*
*p<0.05
Placebo
+APMc
CER-001
HDL3
ApoA-I

FIG. 20

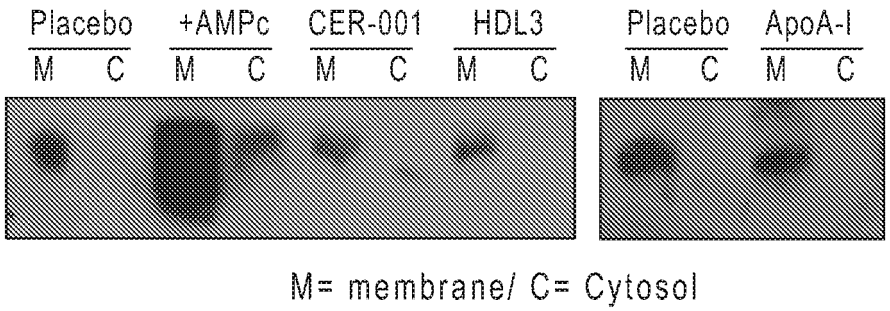

Placebo
+AMPc
CER-001
HDL3
Placebo
ApoA-I
M C M C M C M C M C M C
M= membrane/ C= Cytosol

FIG. 21

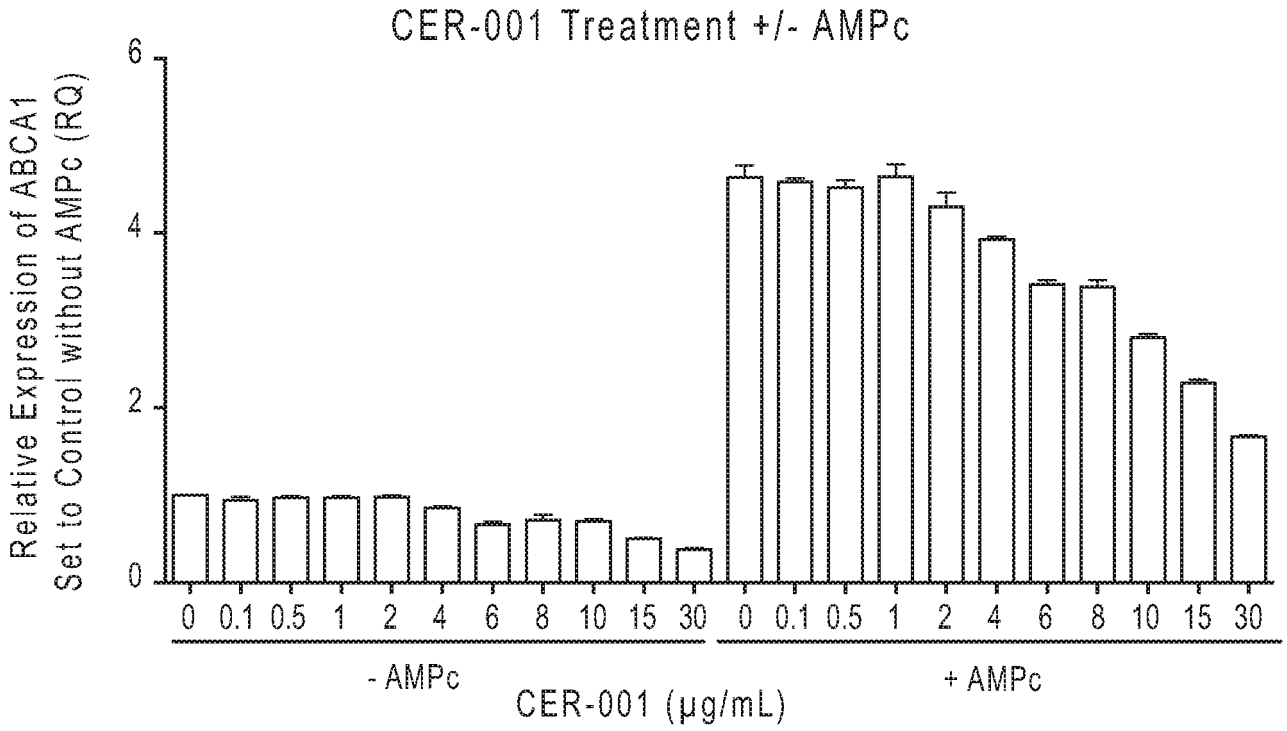

CER-001 Treatment +/- AMPc
Relative Expression of ABCA1
Set to Control without AMPc (RQ)
6
4
2
0
0 0.1 0.5 1 2 4 6 8 10 15 30 0 0.1 0.5 1 2 4 6 8 10 15 30
- AMPc
+ AMPc
CER-001 (µg/mL)

FIG. 22

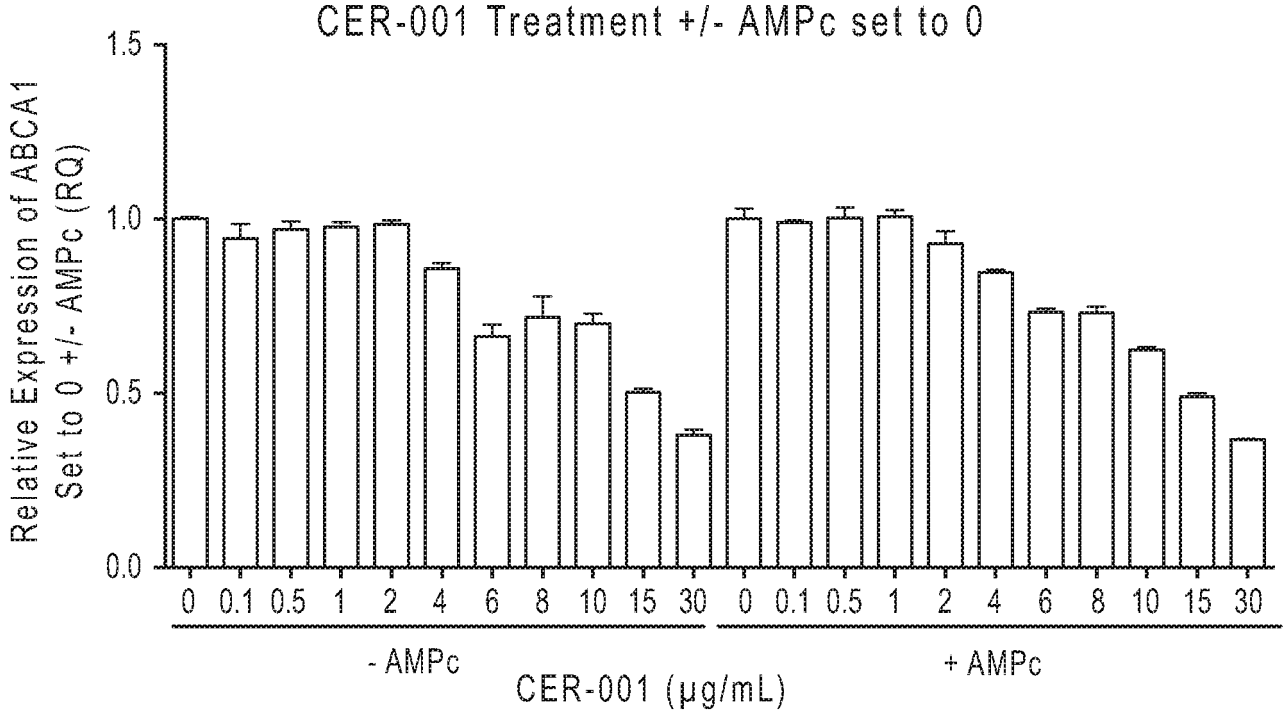

CER-001 Treatment +/- AMPc set to 0
Relative Expression of ABCA1
Set to 0 +/- AMPc (RQ)
1.5
1.0
0.5
0.0
0 0.1 0.5 1 2 4 6 8 10 15 30 0 0.1 0.5 1 2 4 6 8 10 15 30
- AMPc
+ AMPc
CER-001 (µg/mL)

FIG. 23

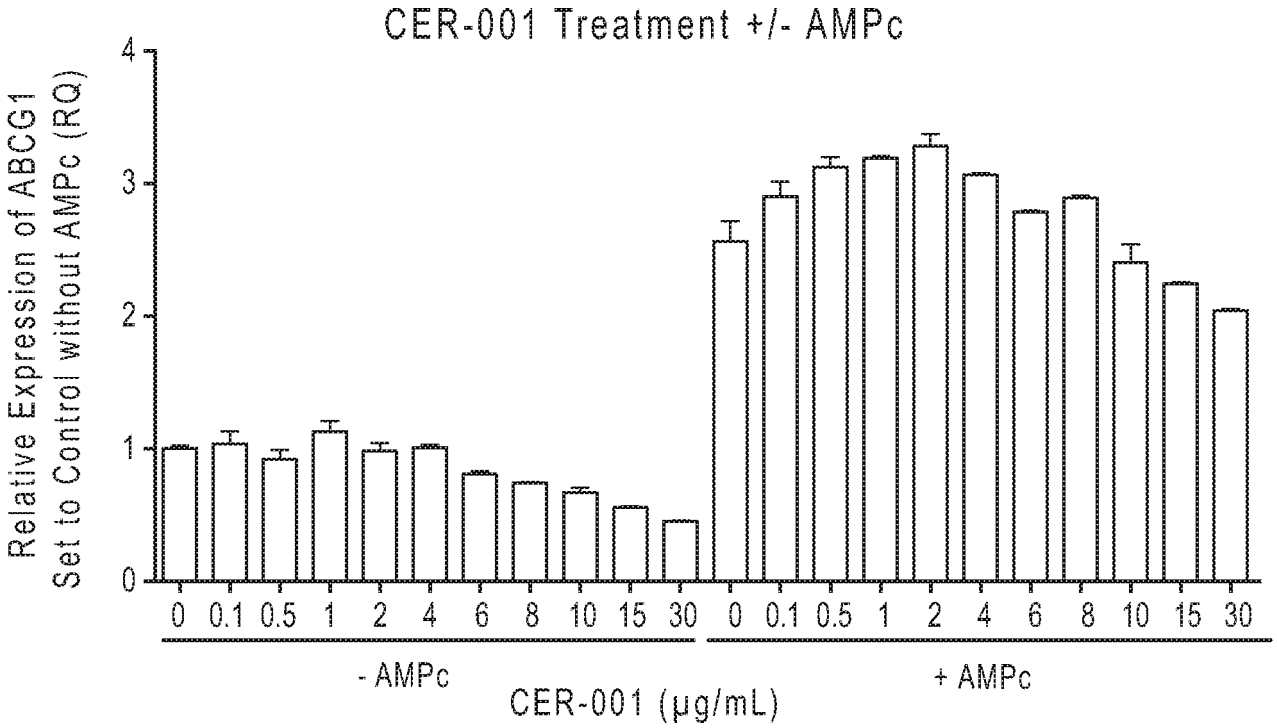

CER-001 Treatment +/- AMPc
Relative Expression of ABCG1
Set to Control without AMPc (RQ)
4
3
2
1
0
0 0.1 0.5 1 2 4 6 8 10 15 30
0 0.1 0.5 1 2 4 6 8 10 15 30
- AMPc
+ AMPc
CER-001 (µg/mL)

FIG. 24

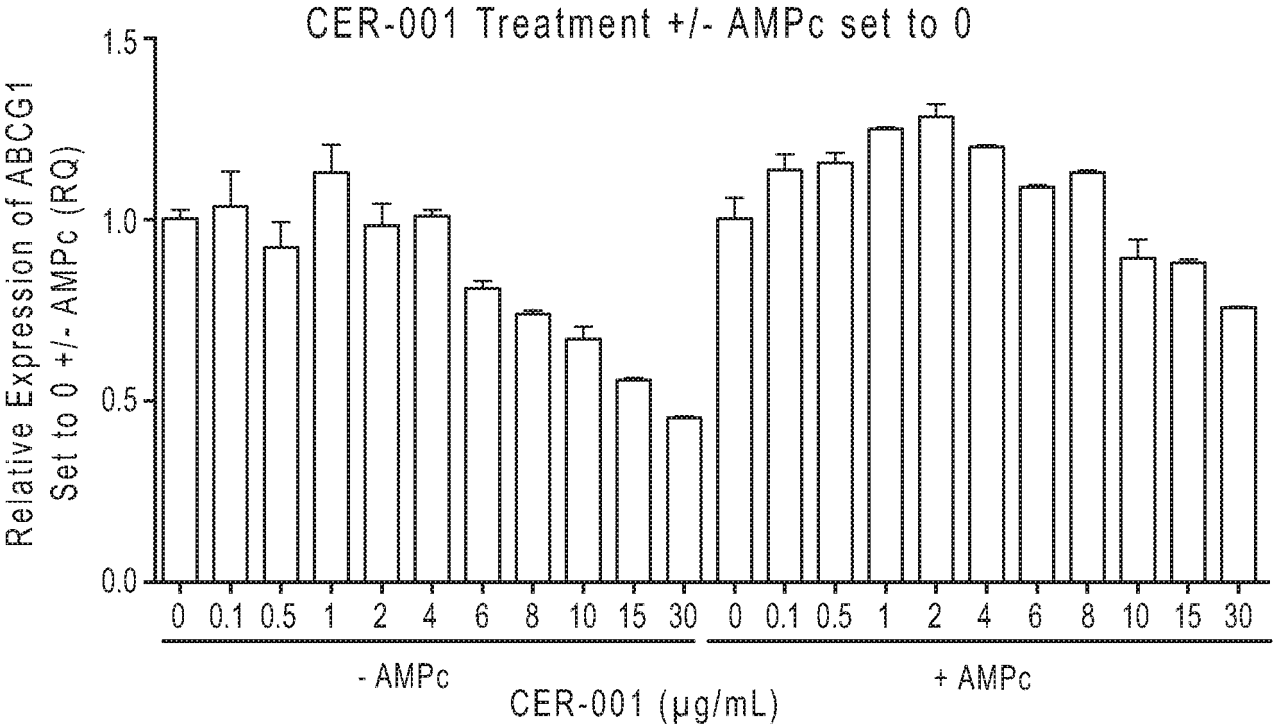

CER-001 Treatment +/- AMPc set to 0
Relative Expression of ABCG1
Set to 0 +/- AMPc (RQ)
1.5
1.0
0.5
0.0
0 0.1 0.5 1 2 4 6 8 10 15 30
0 0.1 0.5 1 2 4 6 8 10 15 30
- AMPc
+ AMPc
CER-001 (µg/mL)

FIG. 25

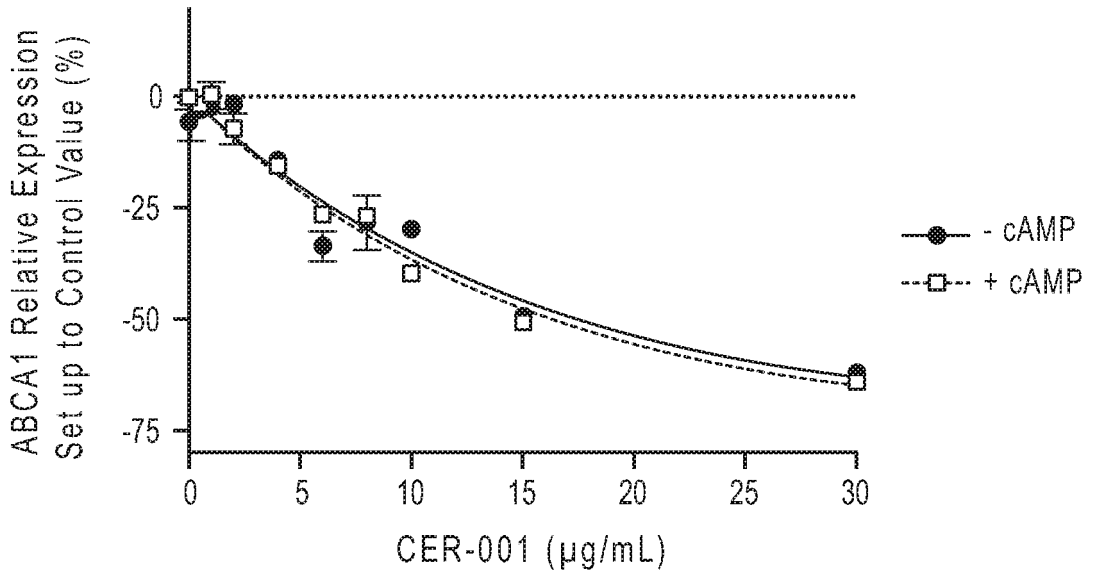

ABCA1 Relative Expression
Set up to Control Value (%)
0
-25
-50
-75
0
5
10
15
20
25
30
CER-001 (µg/mL)
- cAMP
+ cAMP

FIG. 26

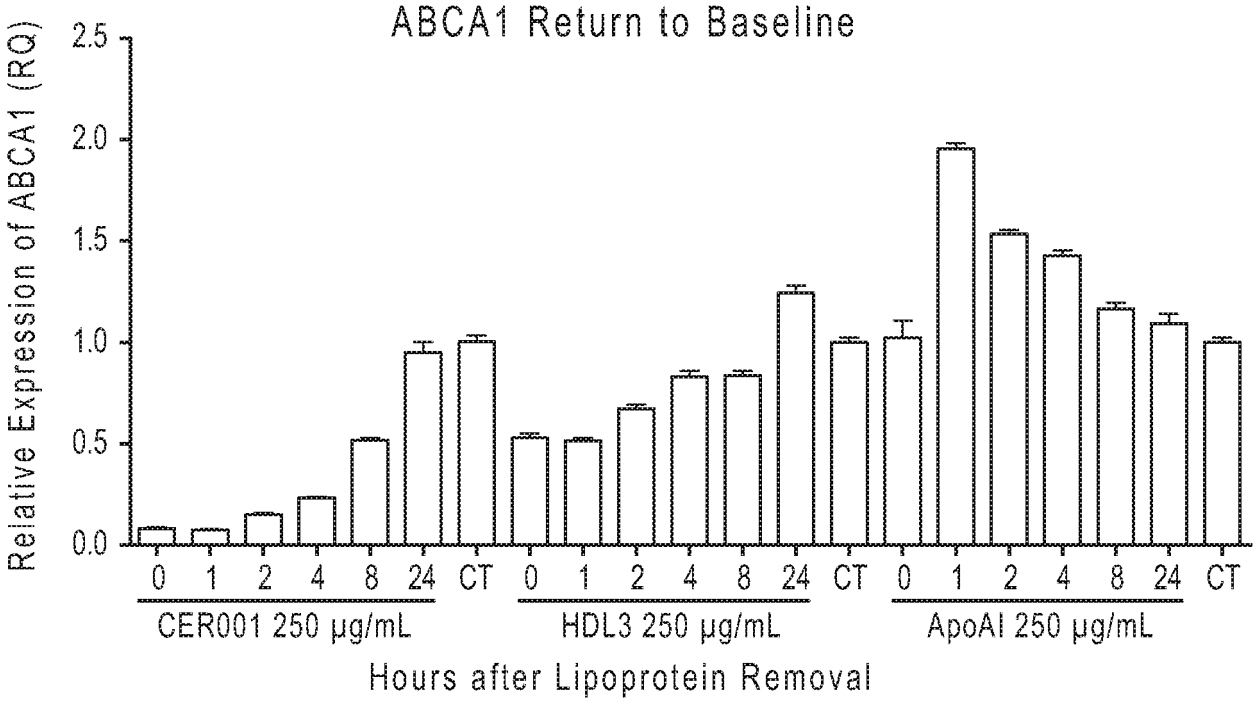

ABCA1 Return to Baseline
Relative Expression of ABCA1 (RQ)
2.5
2.0
1.5
1.0
0.5
0.0
0 1 2 4 8 24 CT 0 1 2 4 8 24 CT 0 1 2 4 8 24 CT
CER001 250 µg/mL
HDL3 250 µg/mL
ApoAI 250 µg/mL
Hours after Lipoprotein Removal

FIG. 27

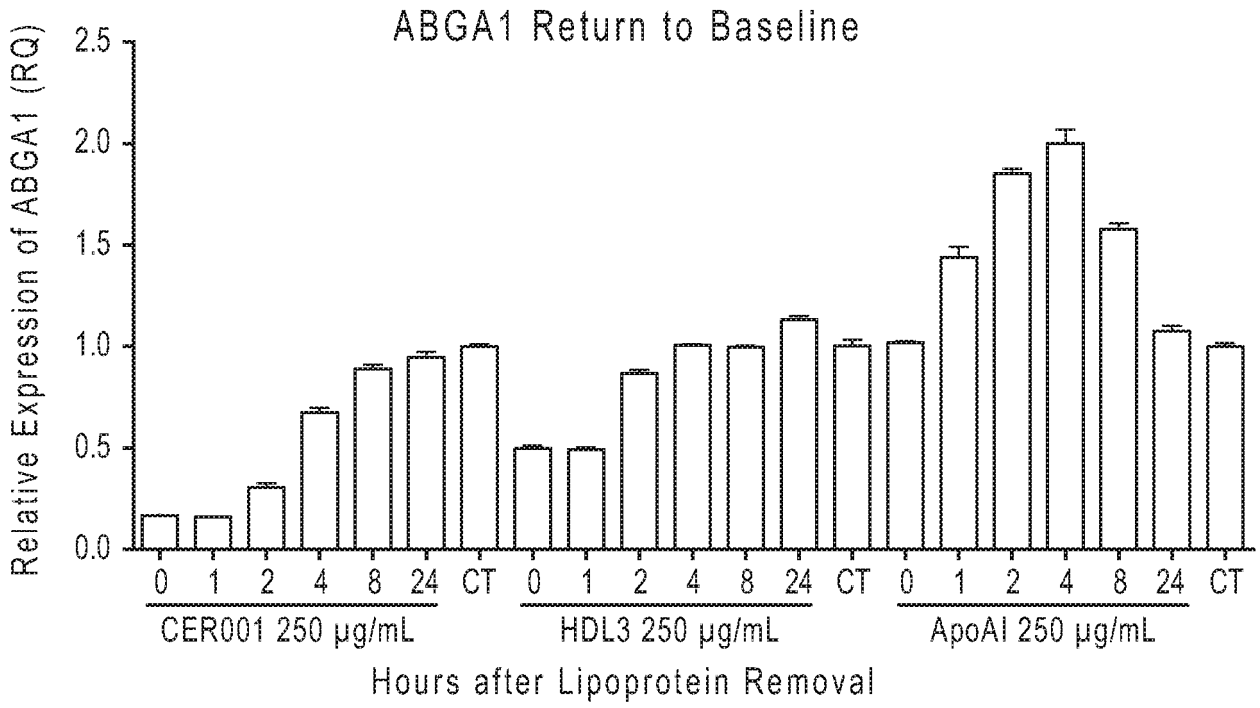

ABGA1 Return to Baseline
Relative Expression of ABGA1 (RQ)
2.5
2.0
1.5
1.0
0.5
0.0
0 1 2 4 8 24 CT 0 1 2 4 8 24 CT 0 1 2 4 8 24 CT
CER001 250 µg/mL
HDL3 250 µg/mL
ApoAI 250 µg/mL
Hours after Lipoprotein Removal

FIG. 28

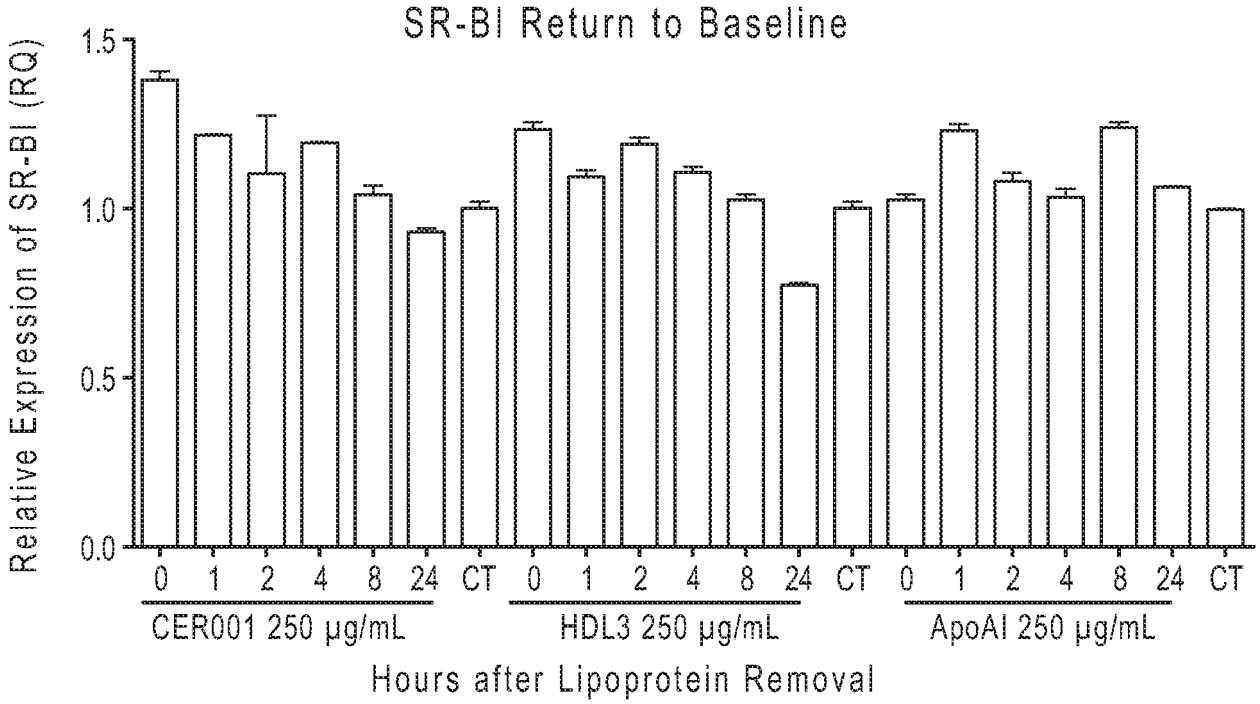

SR-BI Return to Baseline
Relative Expression of SR-BI (RQ)
1.5
1.0
0.5
0.0
0 1 2 4 8 24 CT 0 1 2 4 8 24 CT 0 1 2 4 8 24 CT
CER001 250 µg/mL
HDL3 250 µg/mL
ApoAI 250 µg/mL
Hours after Lipoprotein Removal

FIG. 29

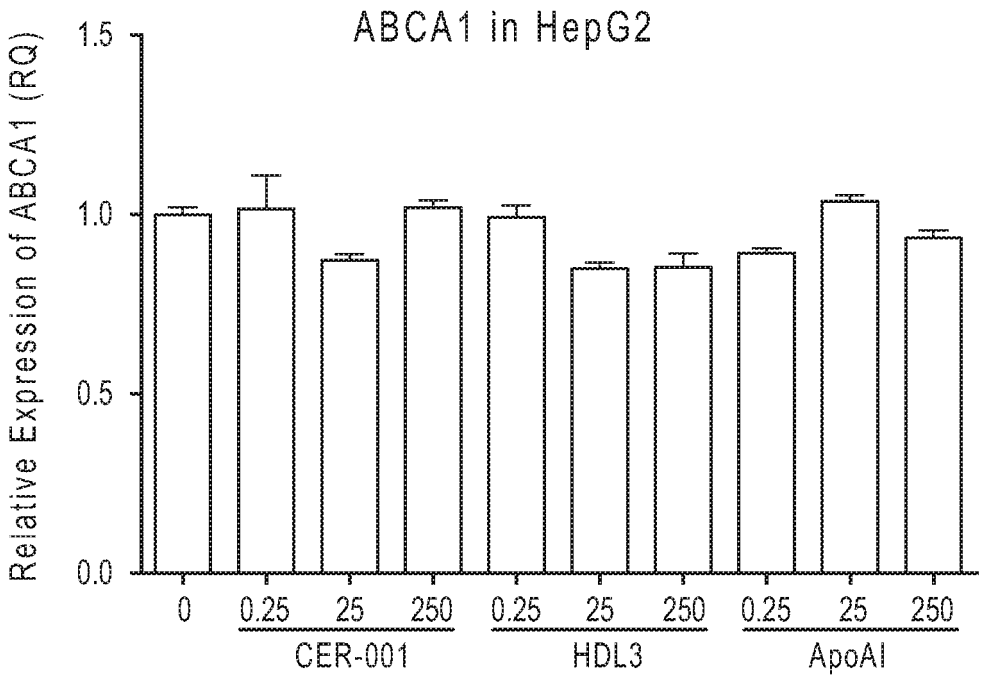

ABCA1 in HepG2
Relative Expression of ABCA1 (RQ)
1.5
1.0
0.5
0.0
0
0.25
25
250
0.25
25
250
0.25
25
250
CER-001
HDL3
ApoAI

FIG. 30

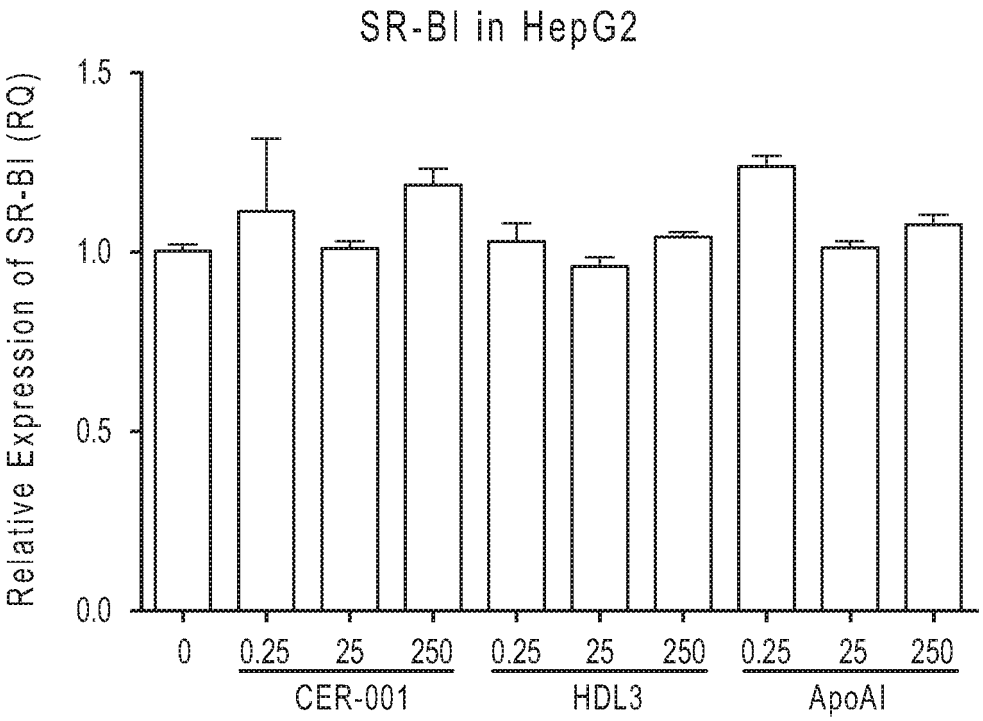

SR-BI in HepG2
Relative Expression of SR-BI (RQ)
1.5
1.0
0.5
0.0
0
0.25
25
250
0.25
25
250
0.25
25
250
CER-001
HDL3
ApoAI

FIG. 31

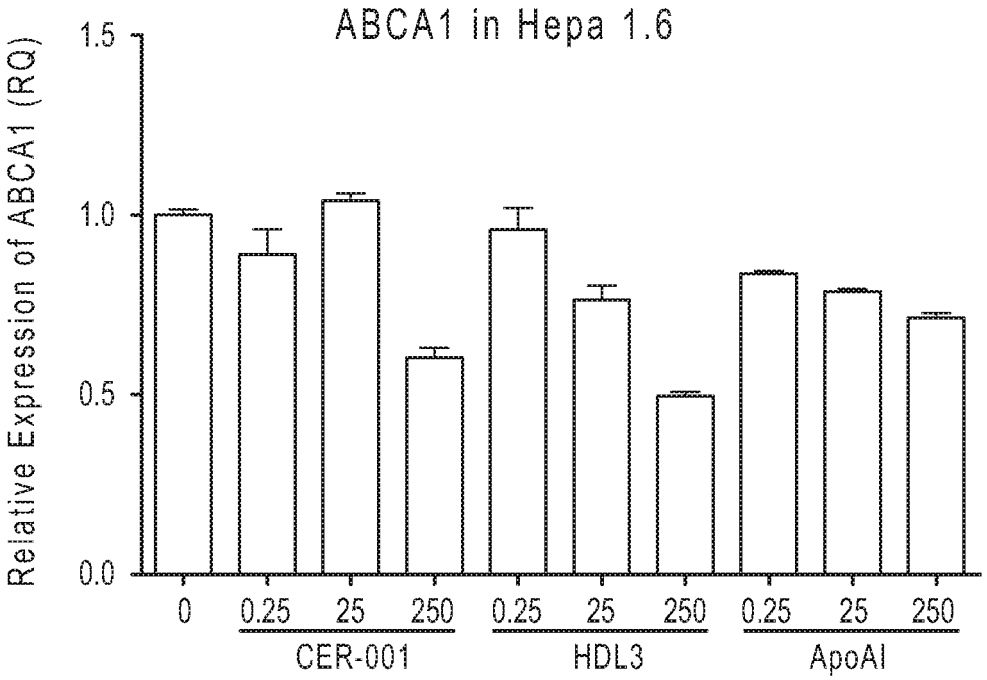

ABCA1 in Hepa 1.6
Relative Expression of ABCA1 (RQ)
1.5
1.0
0.5
0.0
0
0.25
25
250
0.25
25
250
0.25
25
250
CER-001
HDL3
ApoAI

FIG. 32

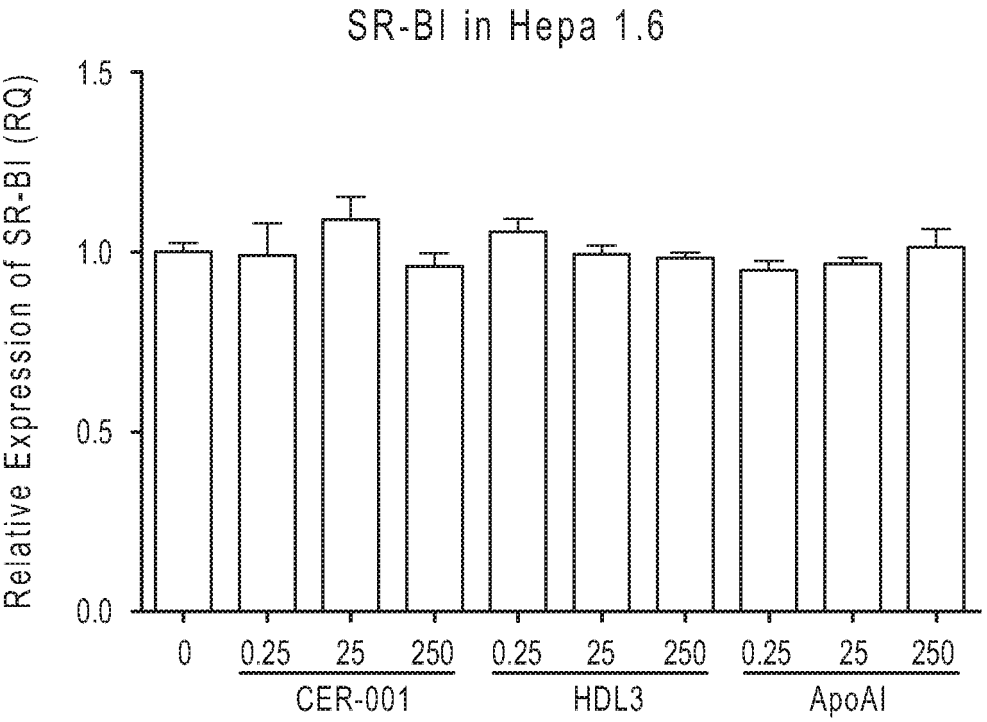

SR-BI in Hepa 1.6
Relative Expression of SR-BI (RQ)
1.5
1.0
0.5
0.0
0
0.25
25
250
0.25
25
250
0.25
25
250
CER-001
HDL3
ApoAI

FIG. 33

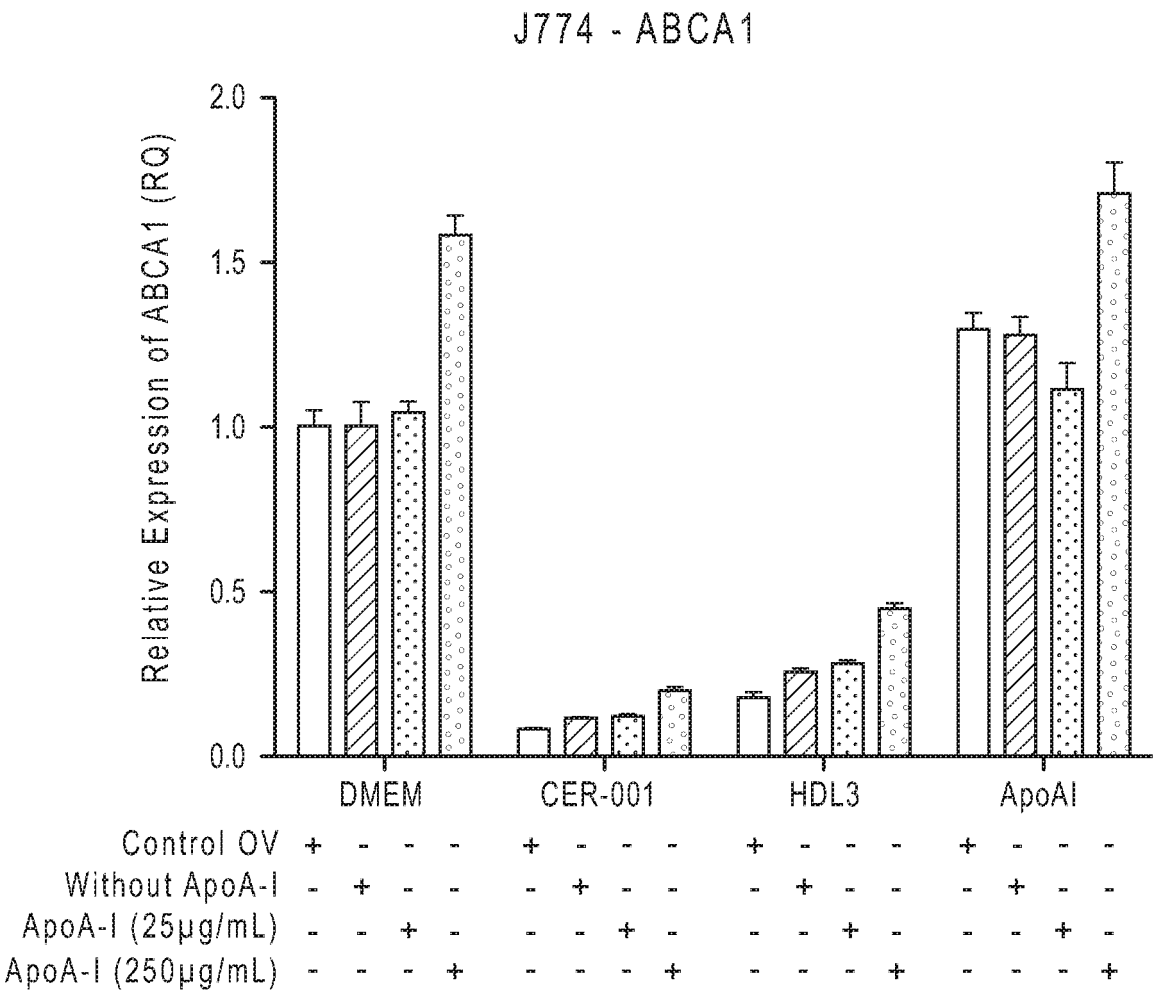

J774 - ABCA1
Relative Expression of ABCA1 (RQ)
2.0
1.5
1.0
0.5
0.0
DMEM
CER-001
HDL3
ApoAI
Control OV + - - - + - - - + - - - + - - -
Without ApoA-I - + - - - + - - - + - - - + - -
ApoA-I (25µg/mL) - - + - - - + - - - + - - - + -
ApoA-I (250µg/mL) - - - + - - - + - - - + - - - +

FIG. 34

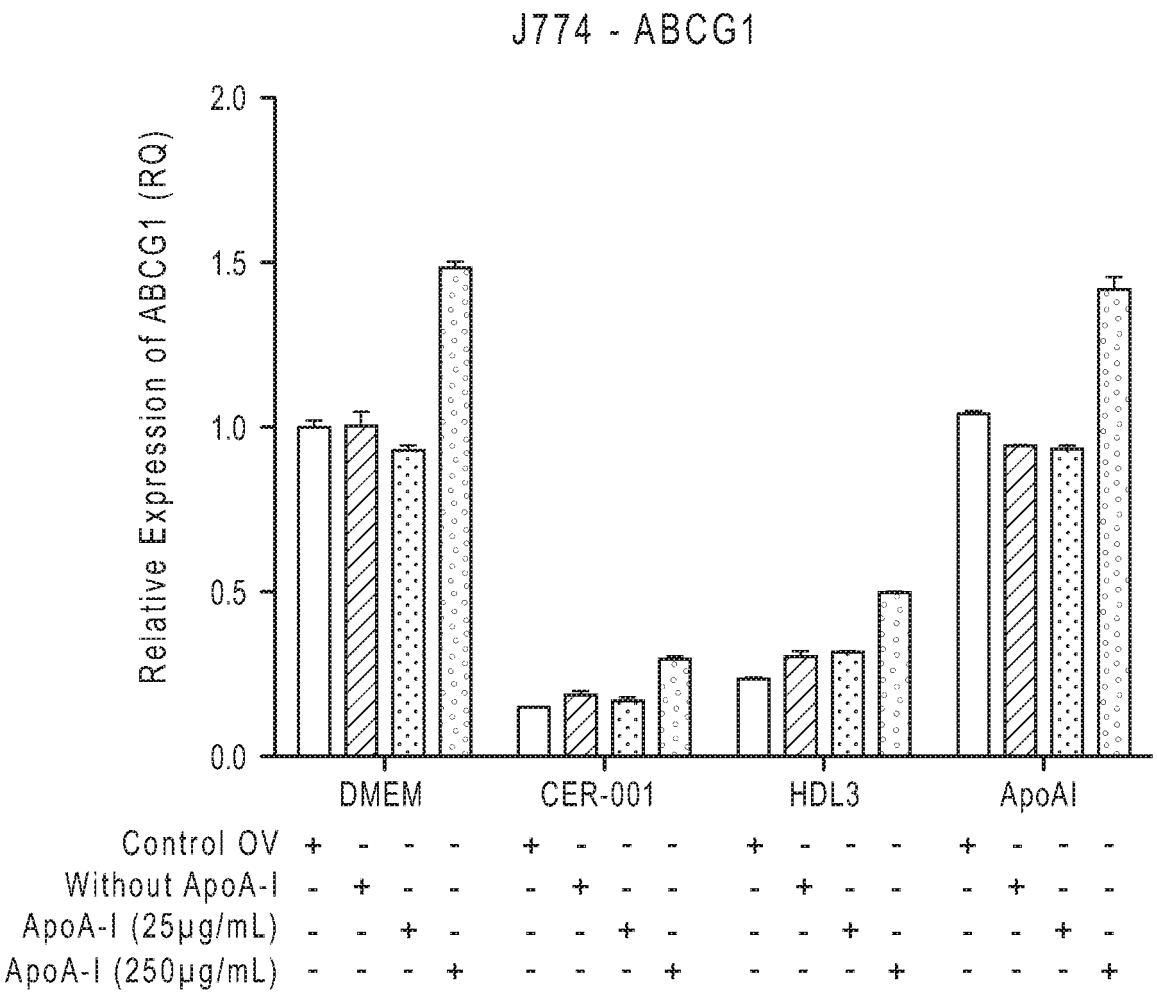

J774 - ABCG1
Relative Expression of ABCG1 (RQ)
2.0
1.5
1.0
0.5
0.0
DMEM
CER-001
HDL3
ApoAI
Control OV + - - - + - - - + - - - + - - -
Without ApoA-I - + - - - + - - - + - - - + - -
ApoA-I (25µg/mL) - - + - - - + - - - + - - - + -
ApoA-I (250µg/mL) - - - + - - - + - - - + - - - +

FIG. 35

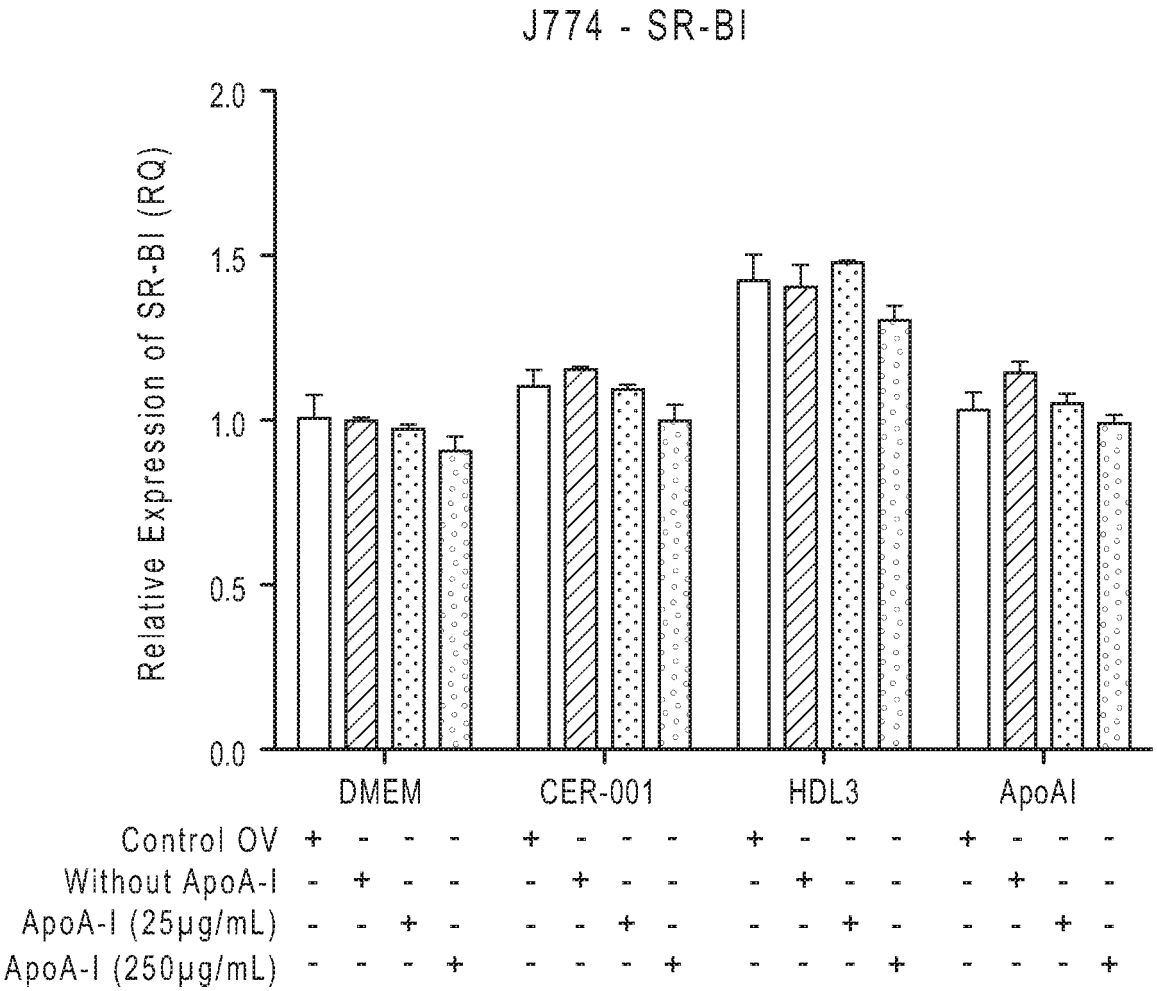

J774 - SR-BI
Relative Expression of SR-BI (RQ)
2.0
1.5
1.0
0.5
0.0
DMEM
CER-001
HDL3
ApoAI
Control OV + - - - + - - - + - - - + - - -
Without ApoA-I - + - - - + - - - + - - - + - -
ApoA-I (25µg/mL) - - + - - - + - - - + - - - + -
ApoA-I (250µg/mL) - - - + - - - + - - - + - - - +

FIG. 36

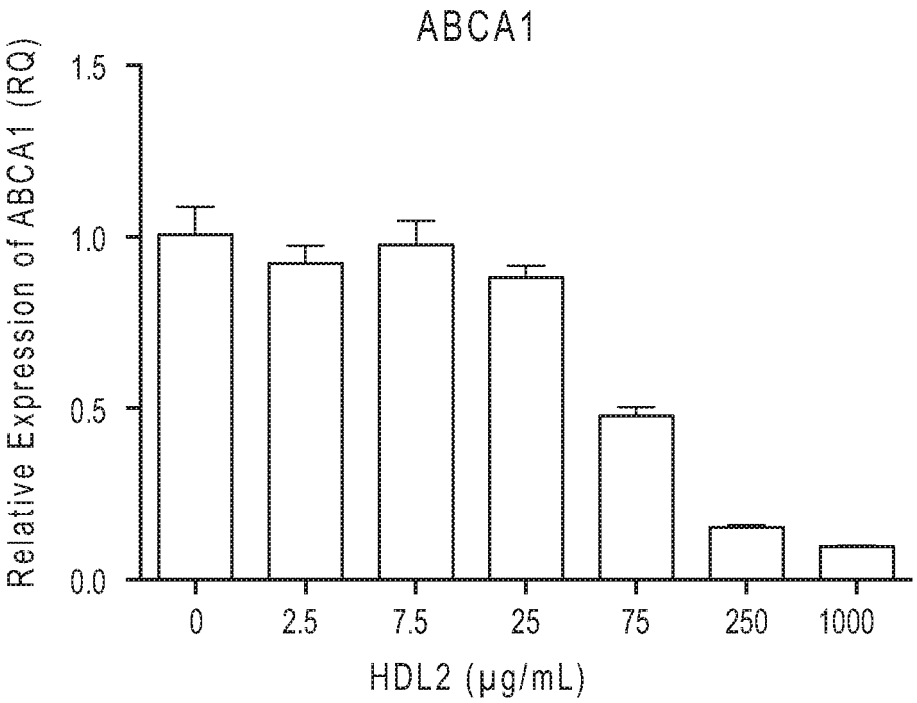

ABCA1
Relative Expression of ABCA1 (RQ)
1.5
1.0
0.5
0.0
0
2.5
7.5
25
75
250
1000
HDL2 (µg/mL)

FIG. 37

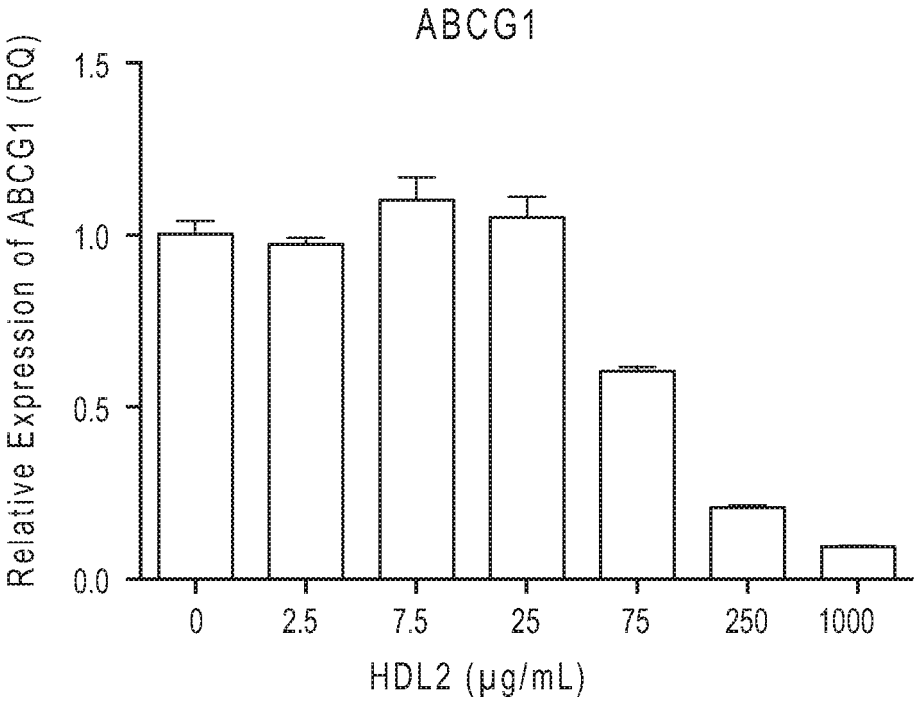

ABCG1
Relative Expression of ABCG1 (RQ)
1.5
1.0
0.5
0.0
0
2.5
7.5
25
75
250
1000
HDL2 (µg/mL)

FIG. 38

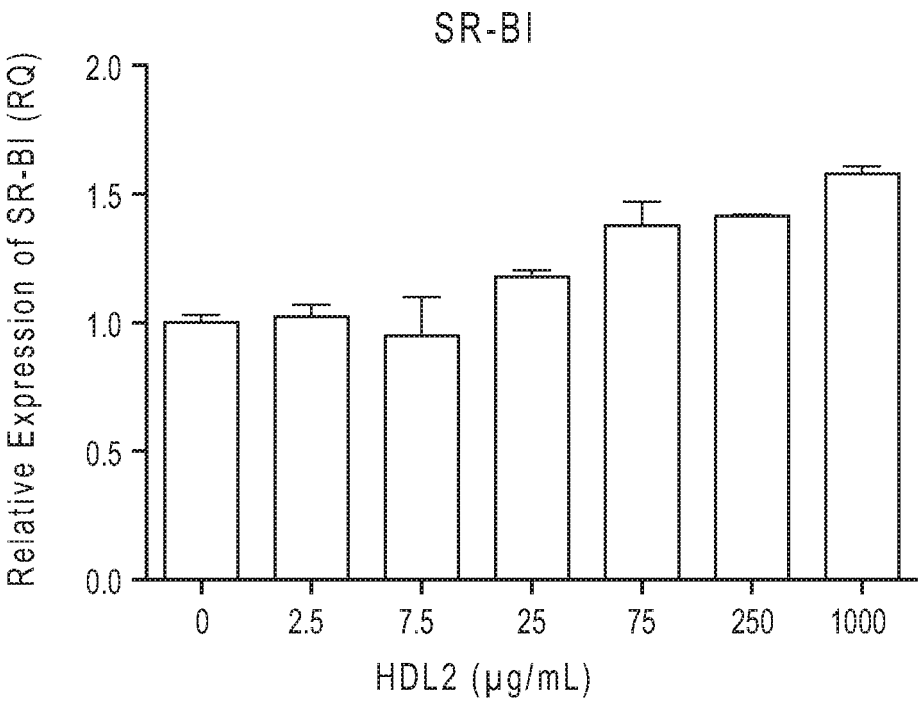

SR-BI
Relative Expression of SR-BI (RQ)
2.0
1.5
1.0
0.5
0.0
0
2.5
7.5
25
75
250
1000
HDL2 (µg/mL)

FIG. 39

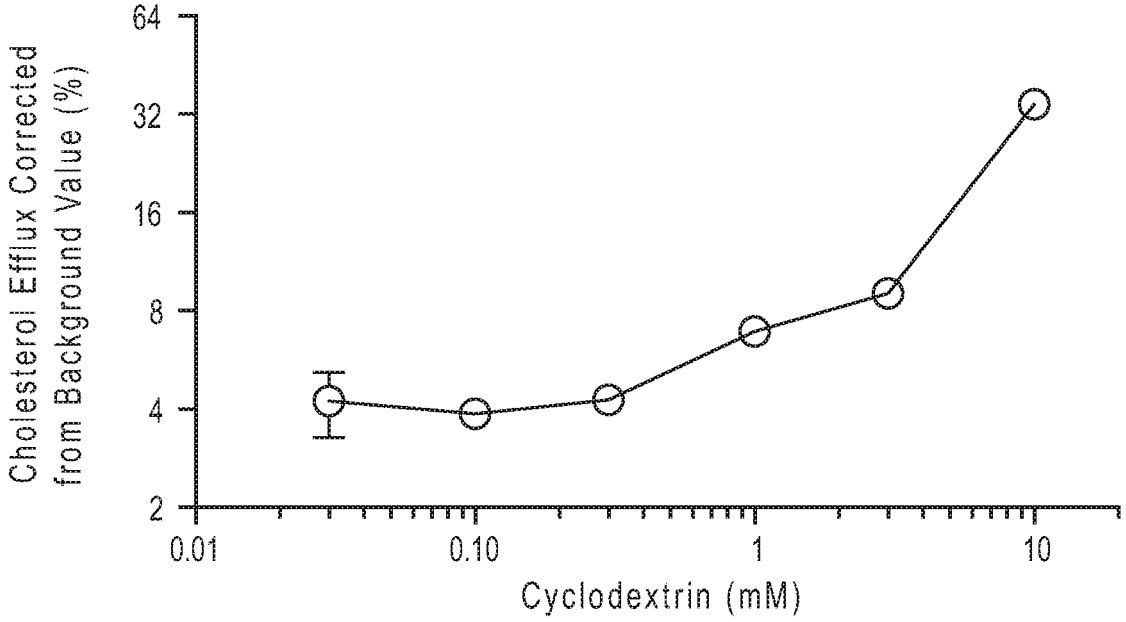

Cholesterol Efflux Corrected from Background Value (%)
64
32
16
8
4
2
0.01
0.10
1
10
Cyclodextrin (mM)

FIG. 40

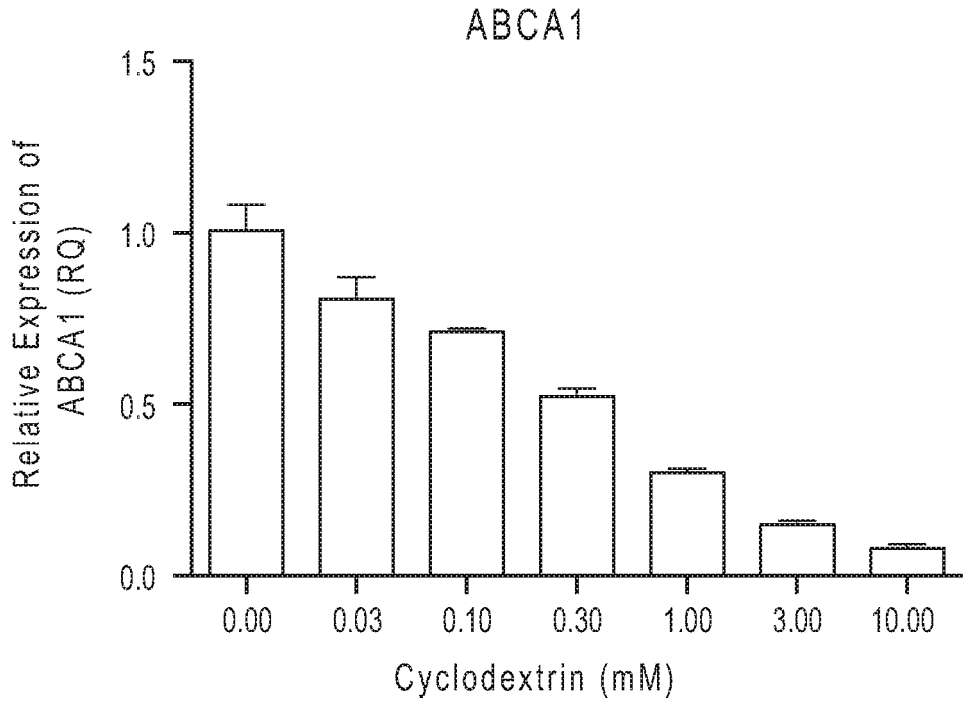

ABCA1
Relative Expression of ABCA1 (RQ)
1.5
1.0
0.5
0.0
0.00
0.03
0.10
0.30
1.00
3.00
10.00
Cyclodextrin (mM)

FIG. 41

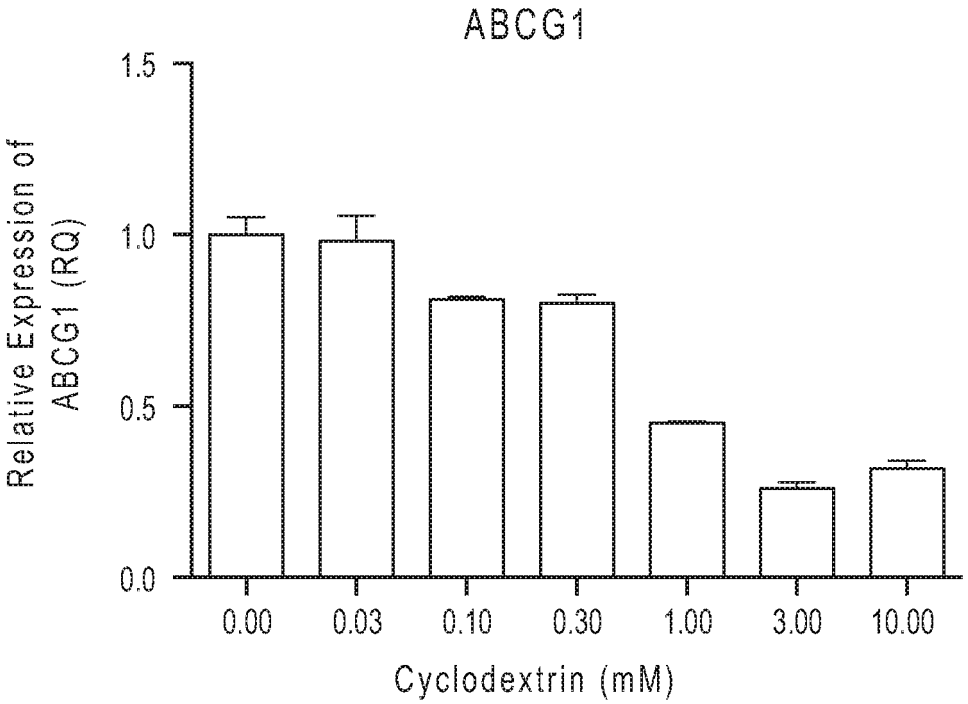

ABCG1
Relative Expression of ABCG1 (RQ)
1.5
1.0
0.5
0.0
0.00
0.03
0.10
0.30
1.00
3.00
10.00
Cyclodextrin (mM)

FIG. 42

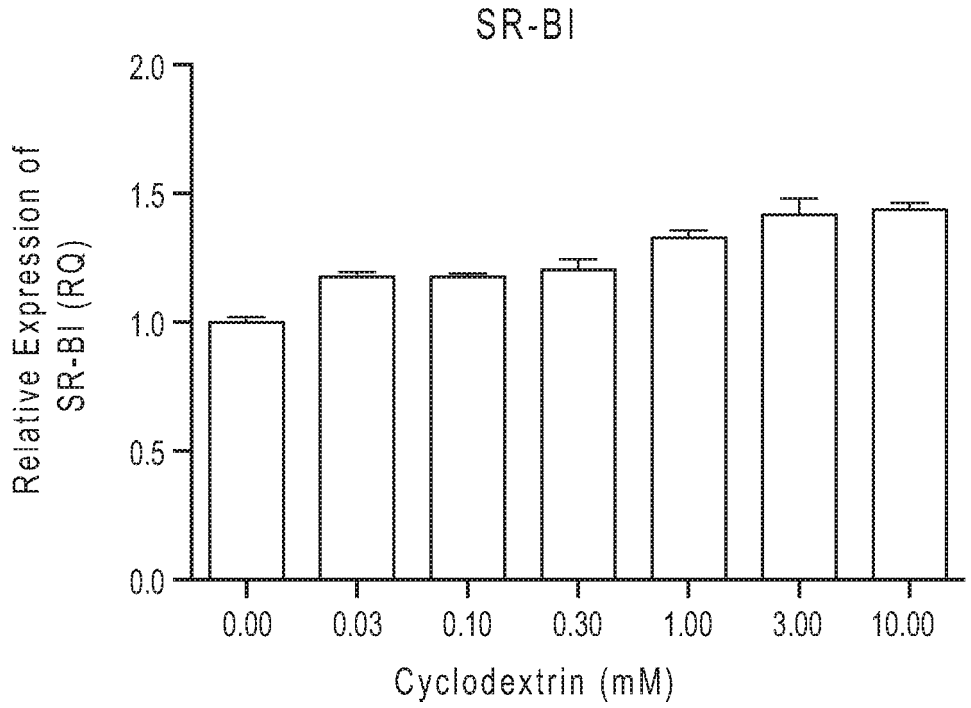

SR-BI
Relative Expression of SR-BI (RQ)
2.0
1.5
1.0
0.5
0.0
0.00
0.03
0.10
0.30
1.00
3.00
10.00
Cyclodextrin (mM)

FIG. 43

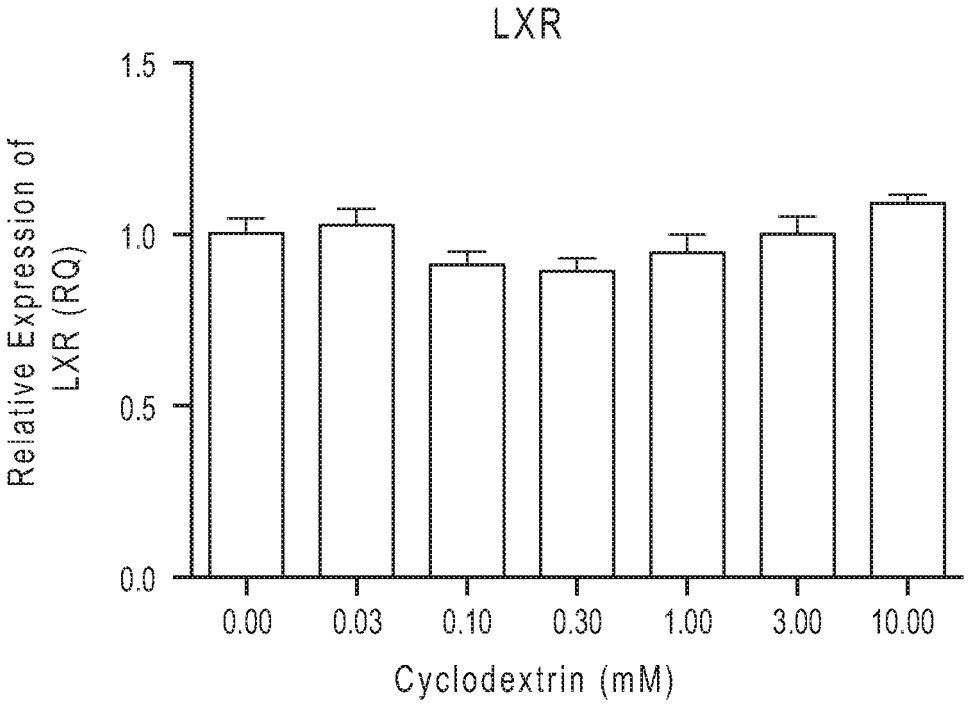

LXR
Relative Expression of LXR (RQ)
1.5
1.0
0.5
0.0
0.00
0.03
0.10
0.30
1.00
3.00
10.00
Cyclodextrin (mM)

FIG. 44

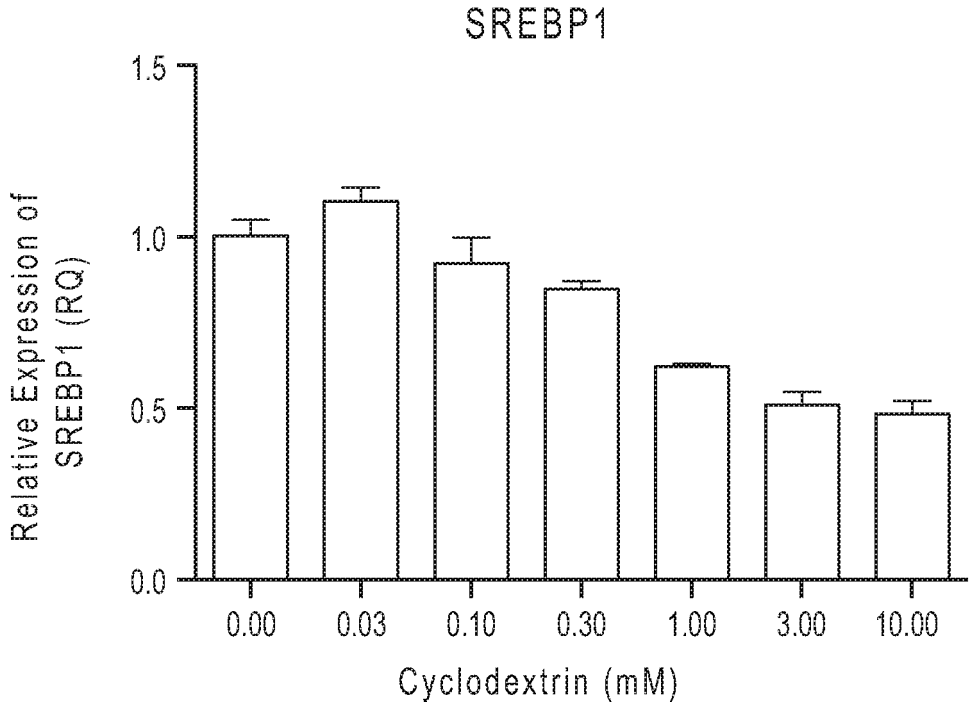

SREBP1
Relative Expression of SREBP1 (RQ)
1.5
1.0
0.5
0.0
0.00
0.03
0.10
0.30
1.00
3.00
10.00
Cyclodextrin (mM)

FIG. 45

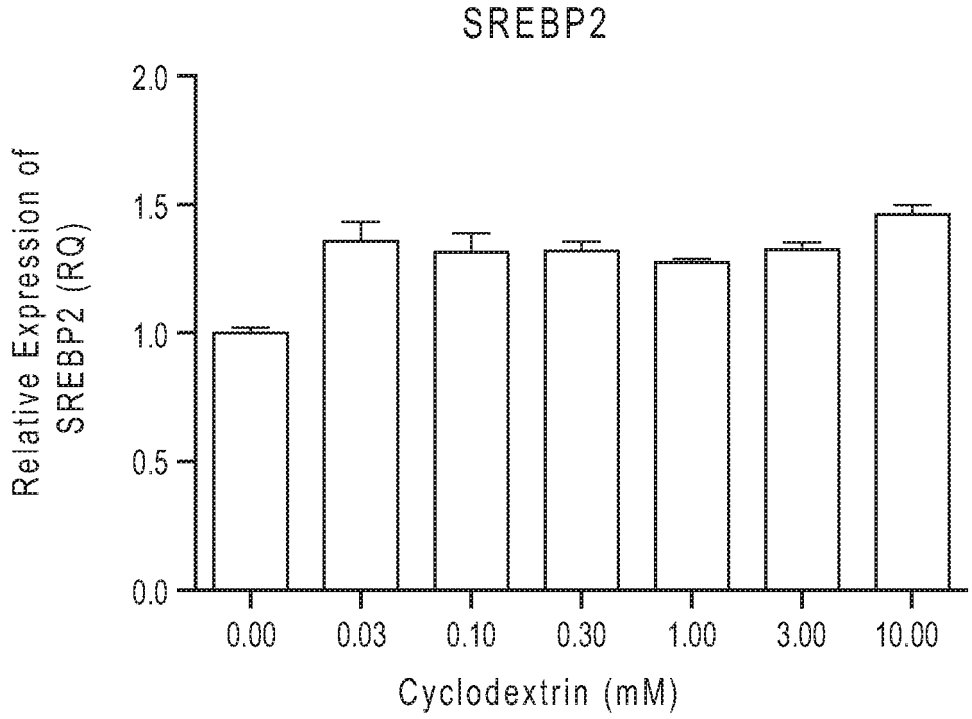

SREBP2
Relative Expression of SREBP2 (RQ)
2.0
1.5
1.0
0.5
0.0
0.00
0.03
0.10
0.30
1.00
3.00
10.00
Cyclodextrin (mM)

FIG. 46

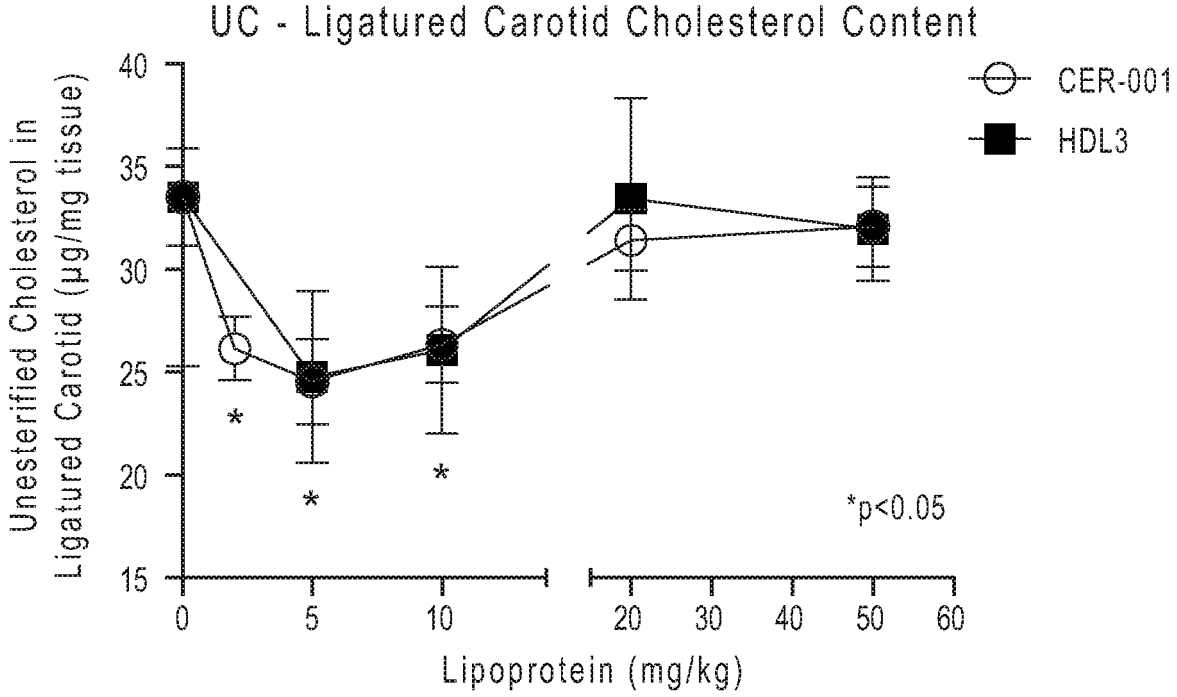

UC - Ligatured Carotid Cholesterol Content
Unesterified Cholesterol in Ligatured Carotid (µg/mg tissue)
40
35
30
25
20
15
0
5
10
20
30
40
50
60
Lipoprotein (mg/kg)
CER-001
HDL3
*
*
*
*p<0.05

FIG. 47

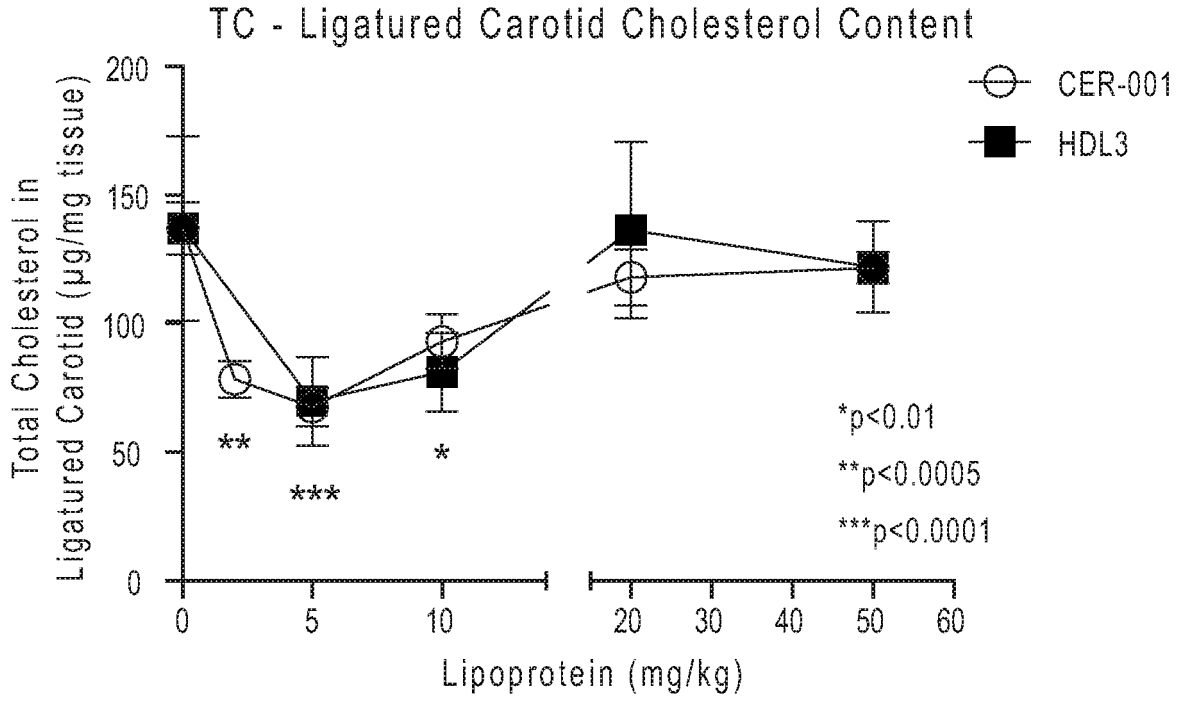

TC - Ligatured Carotid Cholesterol Content
Total Cholesterol in Ligatured Carotid (µg/mg tissue)
200
150
100
50
0
0
5
10
20
30
40
50
60
Lipoprotein (mg/kg)
CER-001
HDL3
**
***
*
*p<0.01
**p<0.0005
***p<0.0001

FIG. 48

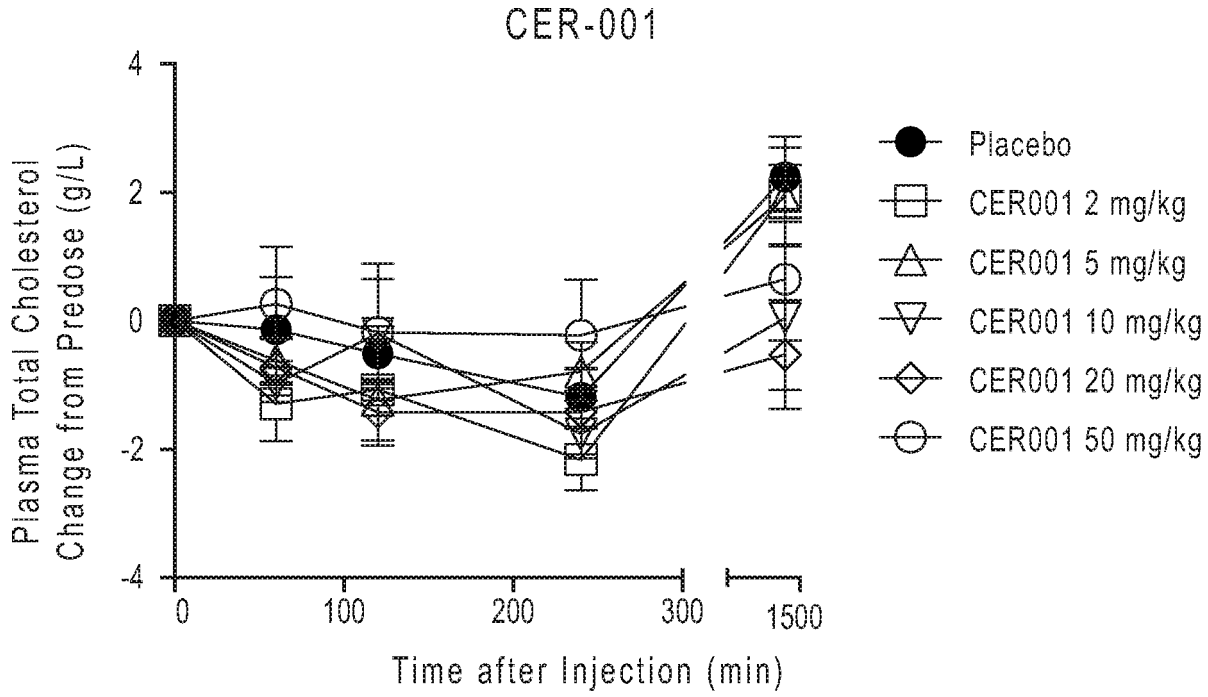

CER-001
Plasma Total Cholesterol
Change from Predose (g/L)
4
2
0
-2
-4
0
100
200
300
1500
Time after Injection (min)
Placebo
CER001 2 mg/kg
CER001 5 mg/kg
CER001 10 mg/kg
CER001 20 mg/kg
CER001 50 mg/kg

FIG. 49

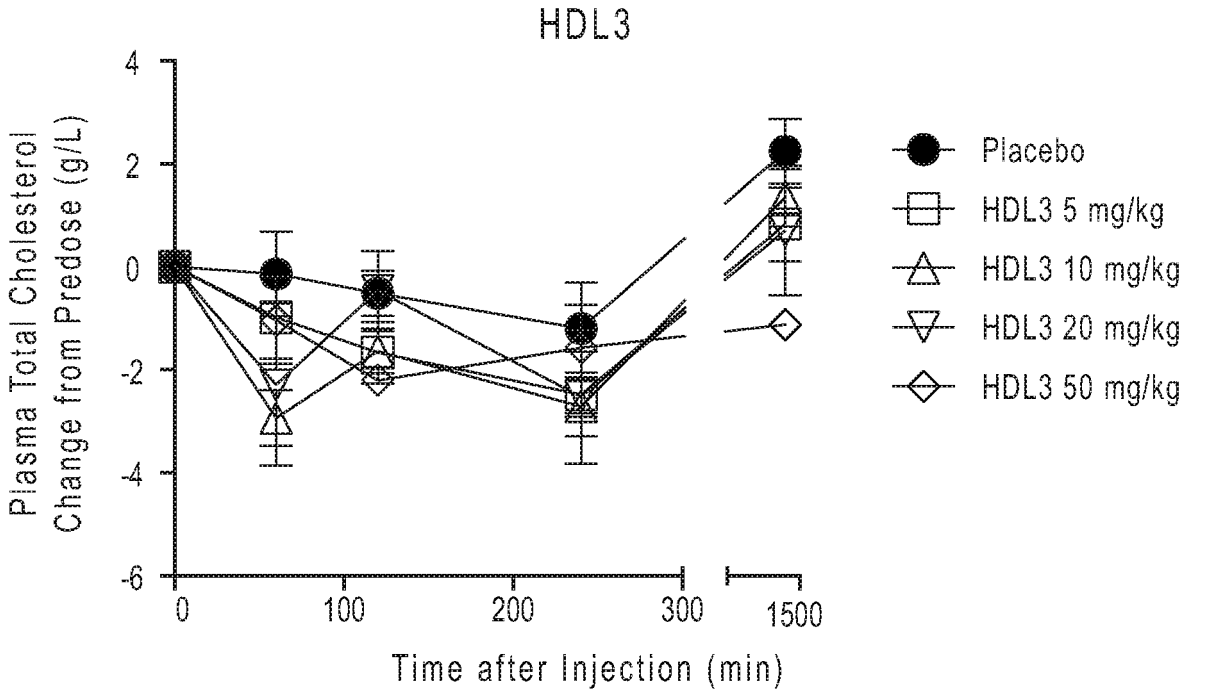

HDL3
Plasma Total Cholesterol
Change from Predose (g/L)
4
2
0
-2
-4
-6
0
100
200
300
1500
Time after Injection (min)
Placebo
HDL3 5 mg/kg
HDL3 10 mg/kg
HDL3 20 mg/kg
HDL3 50 mg/kg

FIG. 50

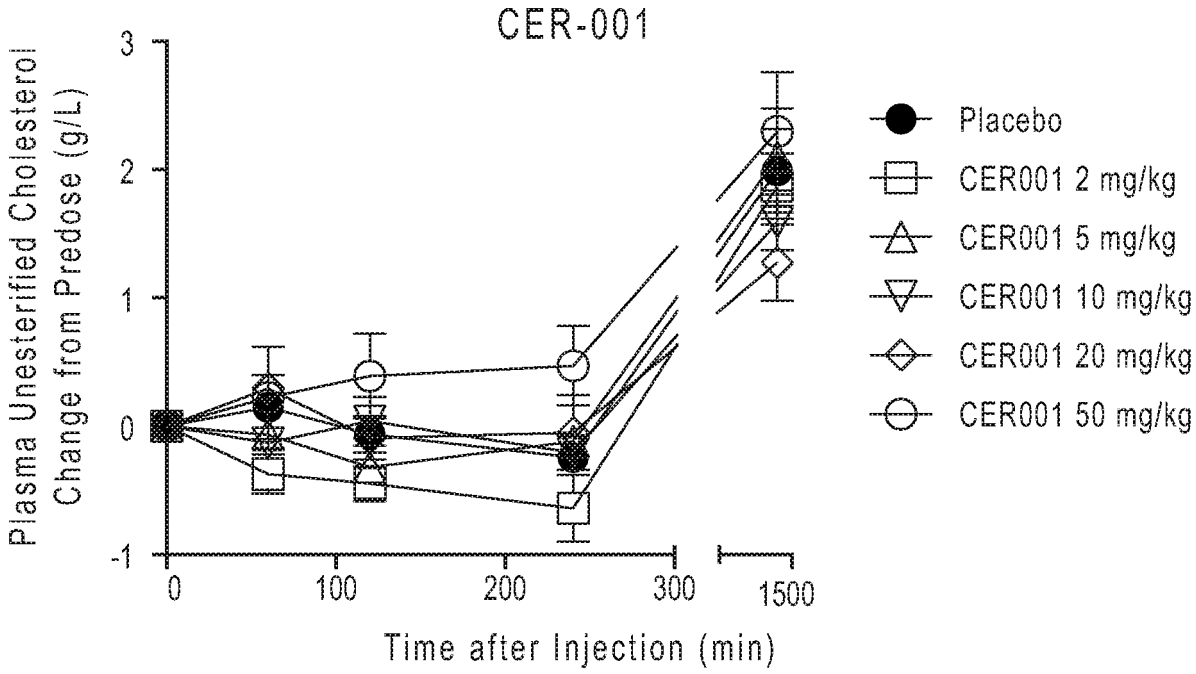

CER-001
Plasma Unesterified Cholesterol
Change from Predose (g/L)
3
2
1
0
-1
0
100
200
300
1500
Time after Injection (min)
Placebo
CER001 2 mg/kg
CER001 5 mg/kg
CER001 10 mg/kg
CER001 20 mg/kg
CER001 50 mg/kg

FIG. 51

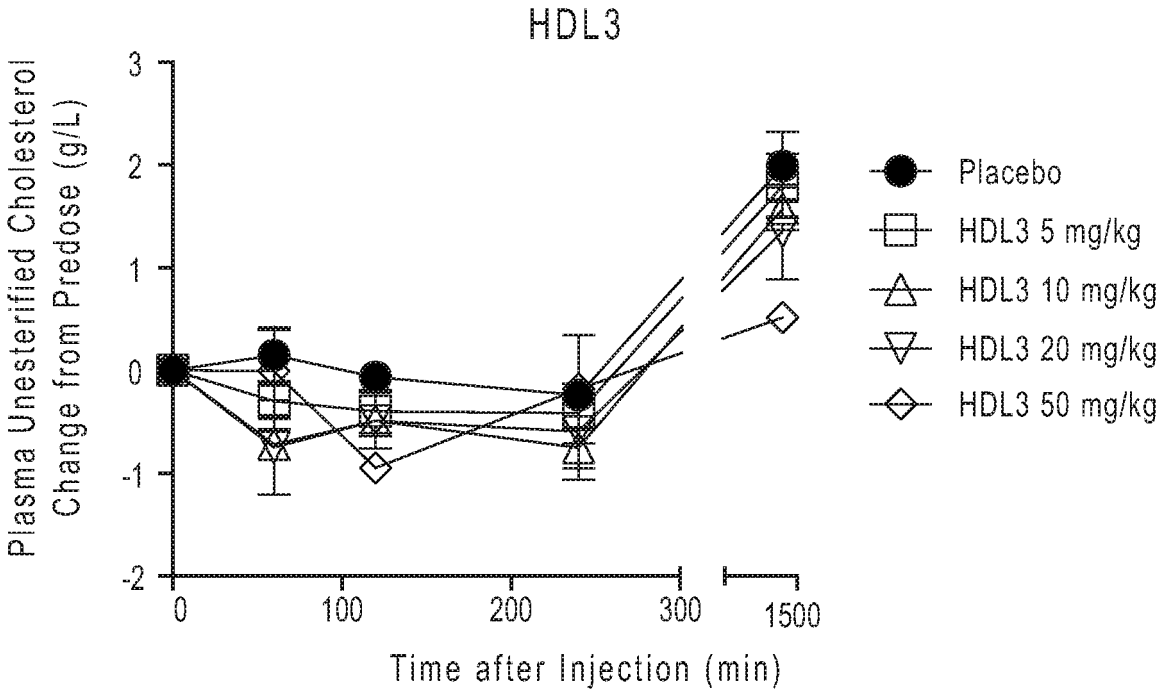

HDL3
Plasma Unesterified Cholesterol
Change from Predose (g/L)
3
2
1
0
-1
-2
0
100
200
300
1500
Time after Injection (min)
Placebo
HDL3 5 mg/kg
HDL3 10 mg/kg
HDL3 20 mg/kg
HDL3 50 mg/kg

FIG. 52

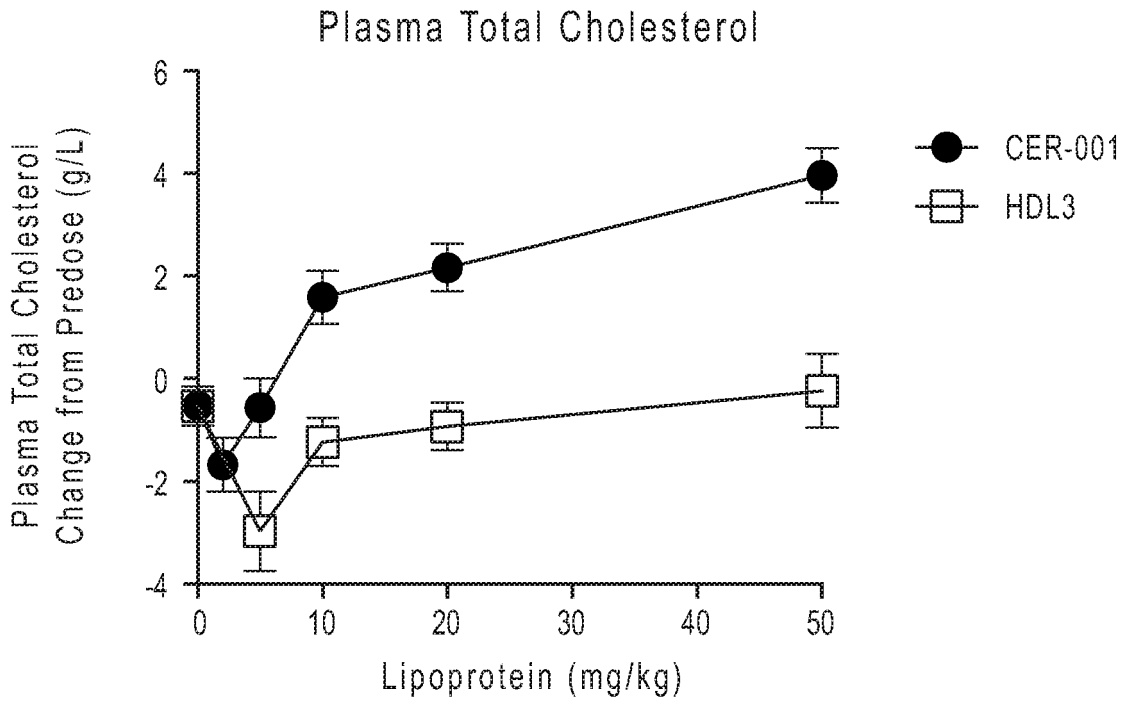

Plasma Total Cholesterol
Plasma Total Cholesterol
Change from Predose (g/L)
6
4
2
0
-2
-4
0
10
20
30
40
50
Lipoprotein (mg/kg)
CER-001
HDL3

FIG. 53

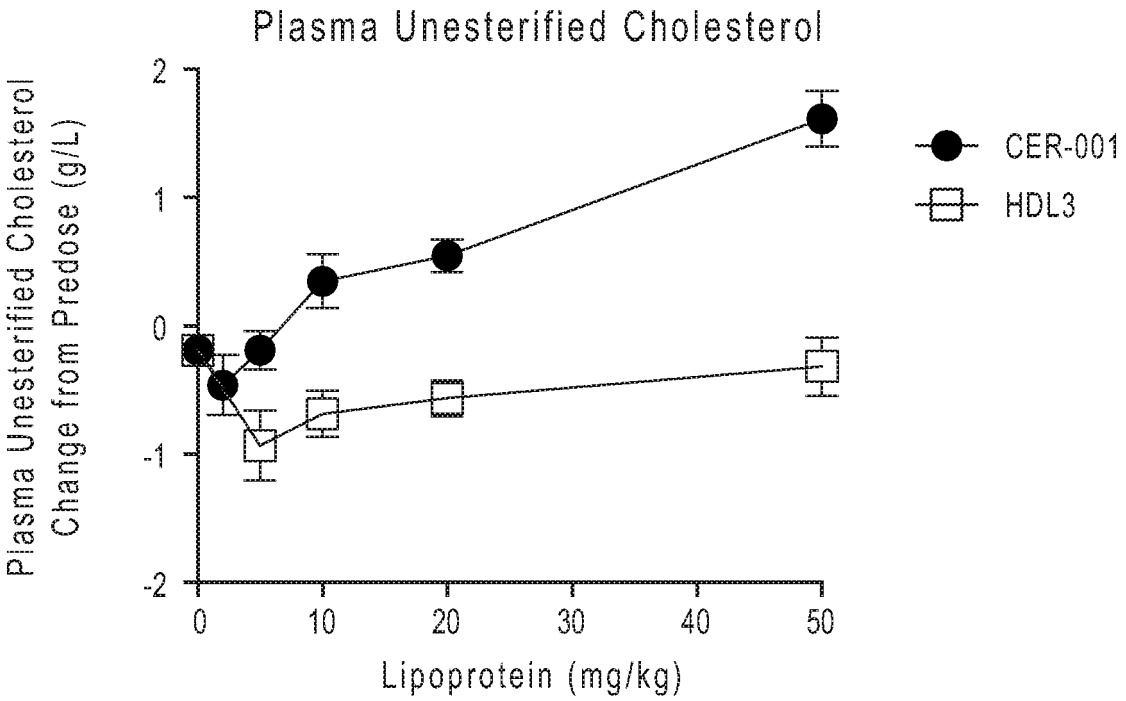

Plasma Unesterified Cholesterol
Plasma Unesterified Cholesterol
Change from Predose (g/L)
2
1
0
-1
-2
0
10
20
30
40
50
Lipoprotein (mg/kg)
CER-001
HDL3

FIG. 54

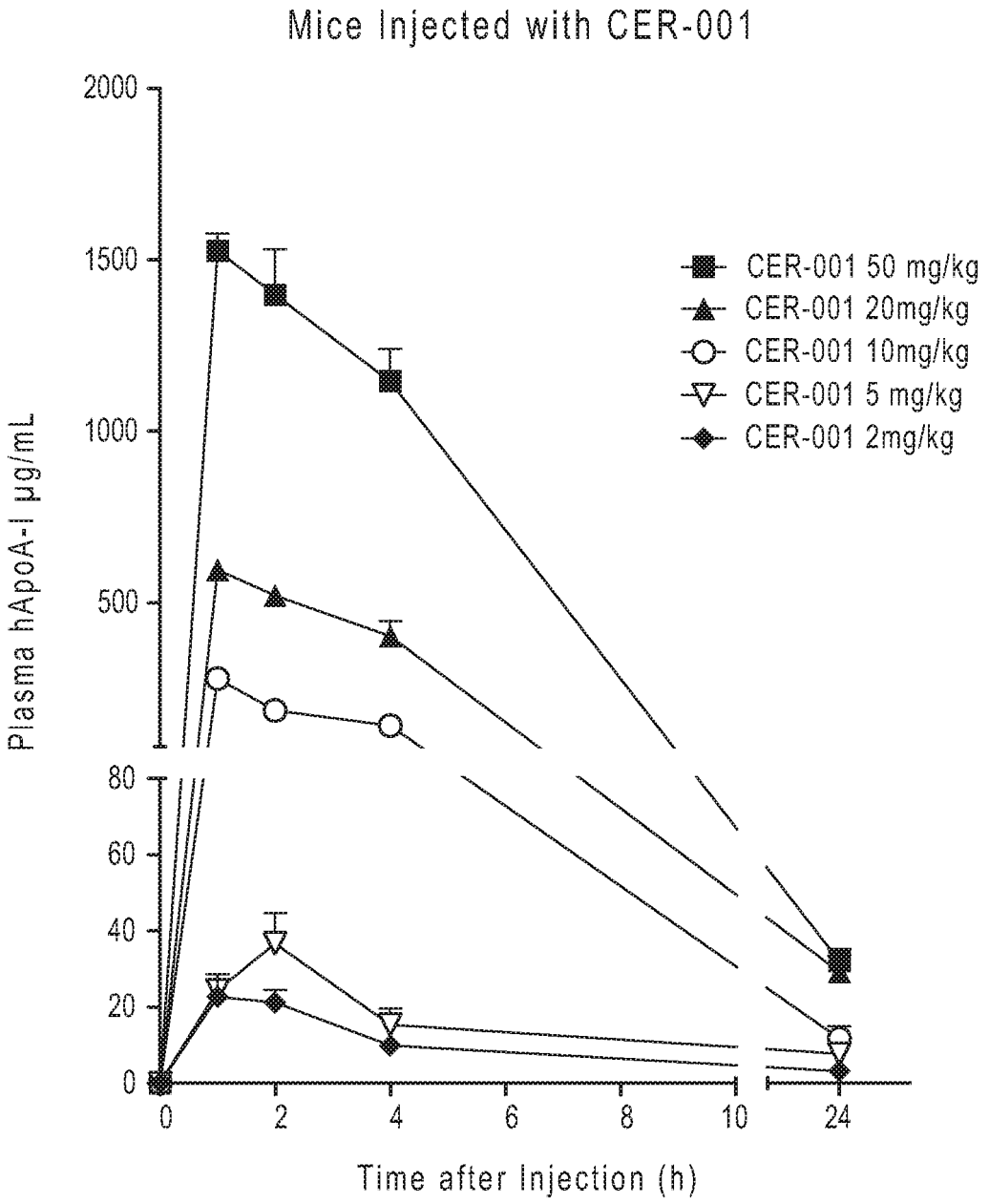

Mice Injected with CER-001
Plasma hApoA-I µg/mL
2000
1500
1000
500
80
60
40
20
0
0
2
4
6
8
10
24
Time after Injection (h)
CER-001 50 mg/kg
CER-001 20mg/kg
CER-001 10mg/kg
CER-001 5 mg/kg
CER-001 2mg/kg

FIG. 55

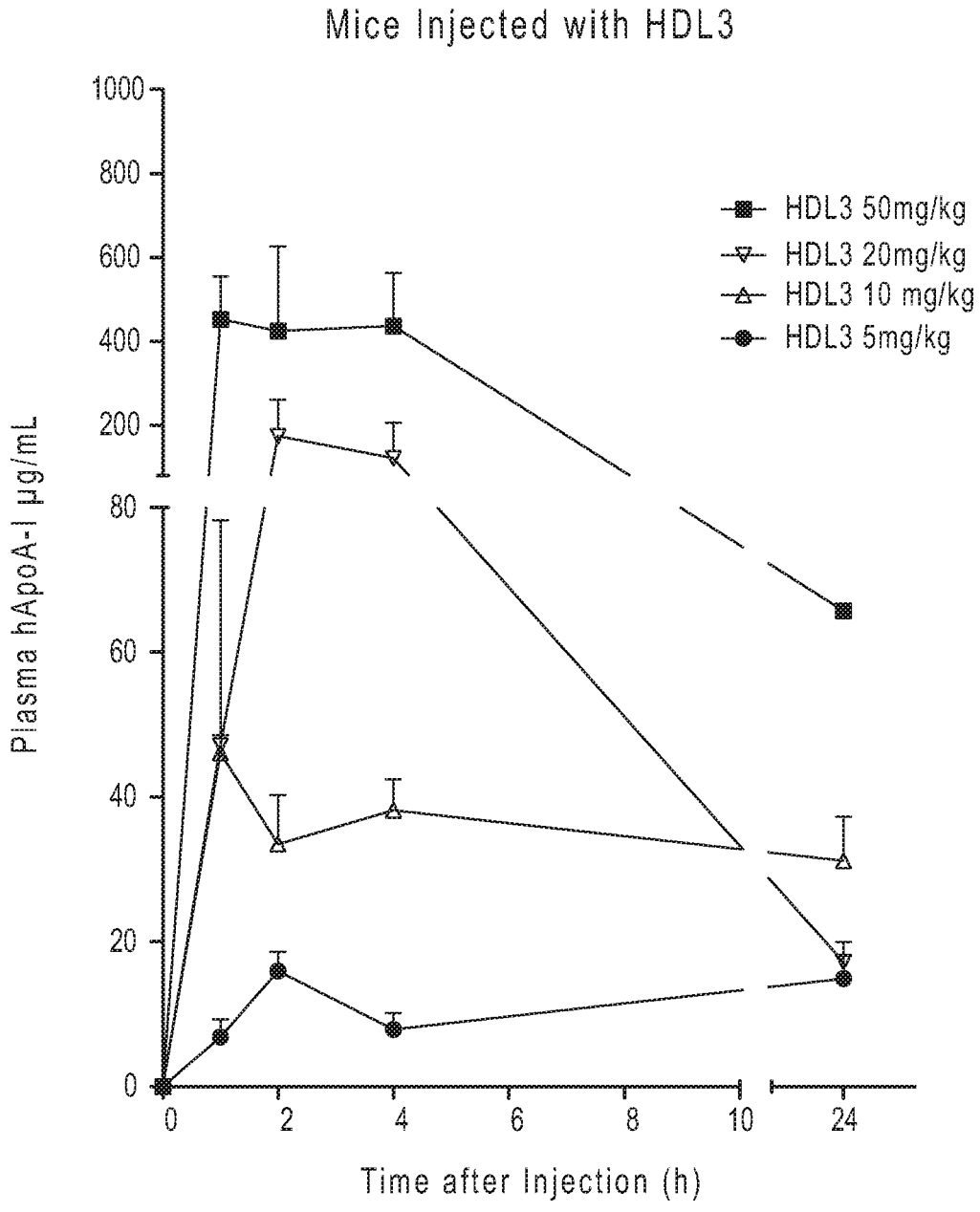

Mice Injected with HDL3
HDL3 50mg/kg
HDL3 20mg/kg
HDL3 10 mg/kg
HDL3 5mg/kg
Plasma hApoA-I µg/mL
1000
800
600
400
200
80
60
40
20
0
0
2
4
6
8
10
24
Time after Injection (h)

FIG. 56

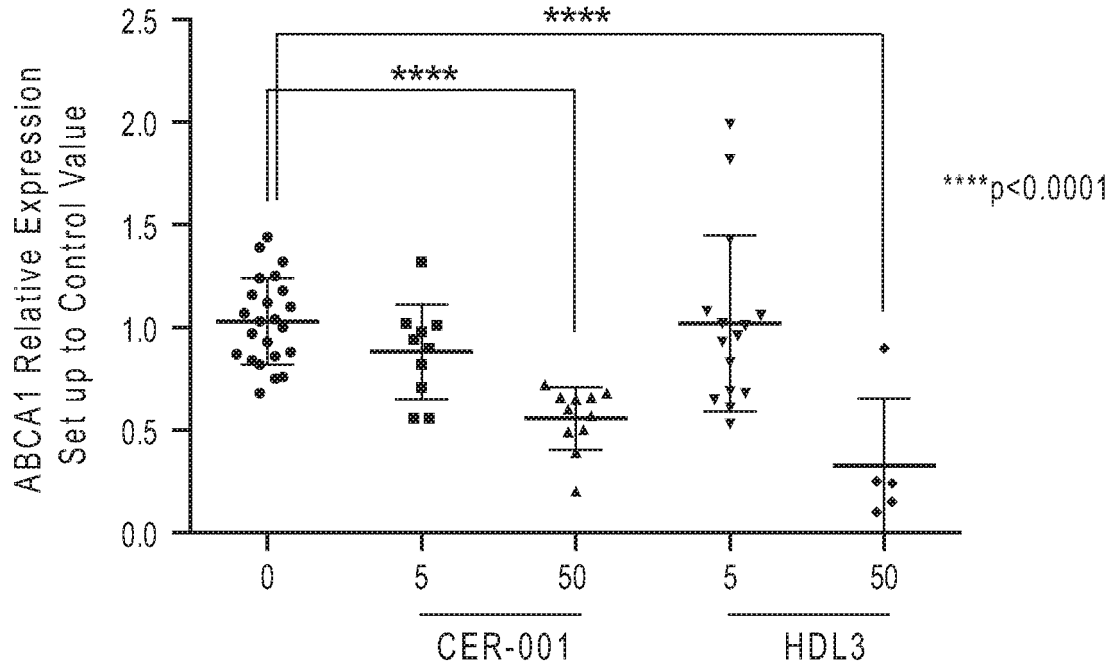

ABCA1 Relative Expression
Set up to Control Value
2.5
2.0
1.5
1.0
0.5
0.0
****
****
****p<0.0001
0
5
50
5
50
CER-001
HDL3

FIG. 57

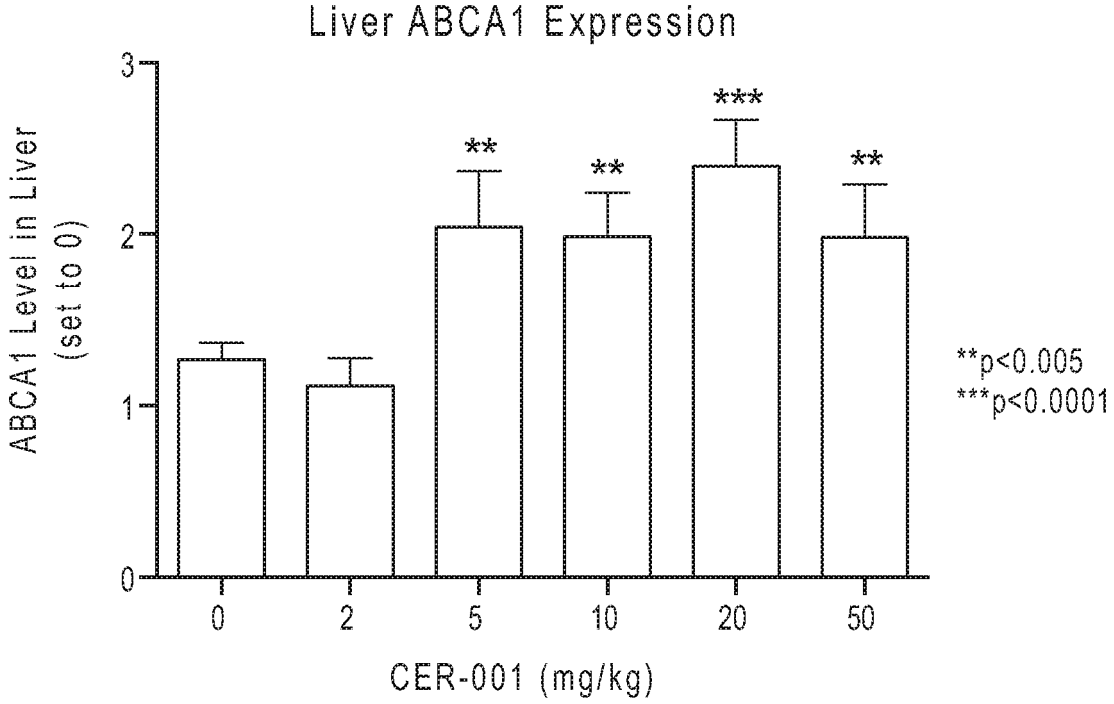

Liver ABCA1 Expression
ABCA1 Level in Liver
(set to 0)
3
2
1
0
**
**
***
**
**p<0.005
***p<0.0001
0
2
5
10
20
50
CER-001 (mg/kg)

FIG. 58

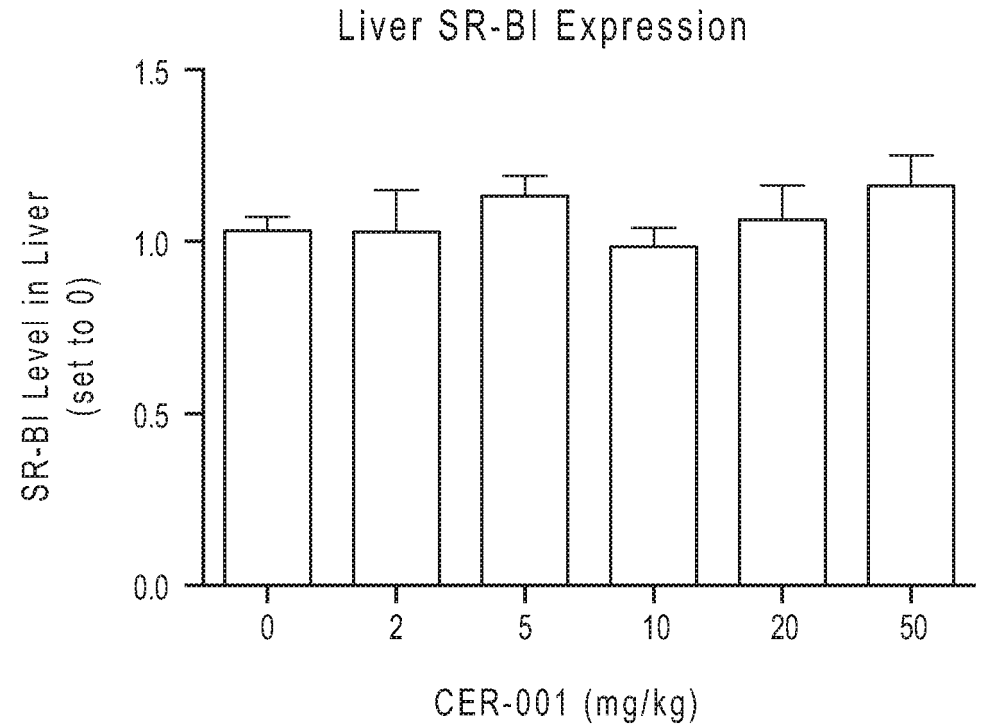

Liver SR-BI Expression
SR-BI Level in Liver (set to 0)
1.5
1.0
0.5
0.0
0
2
5
10
20
50
CER-001 (mg/kg)

FIG. 59

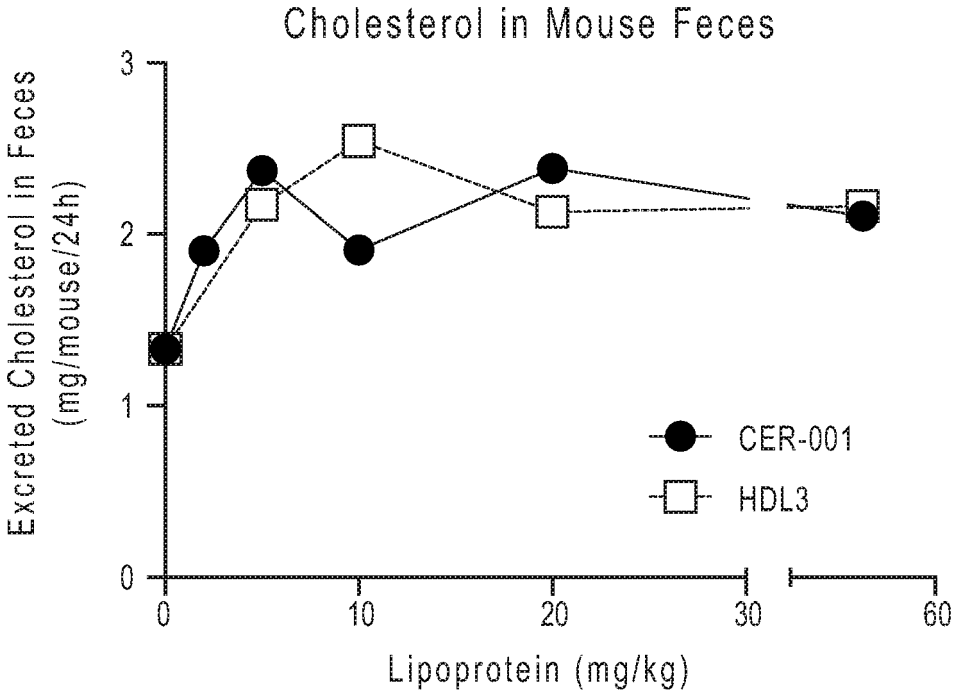

Cholesterol in Mouse Feces
Excreted Cholesterol in Feces (mg/mouse/24h)
3
2
1
0
0
10
20
30
60
CER-001
HDL3
Lipoprotein (mg/kg)

FIG. 60

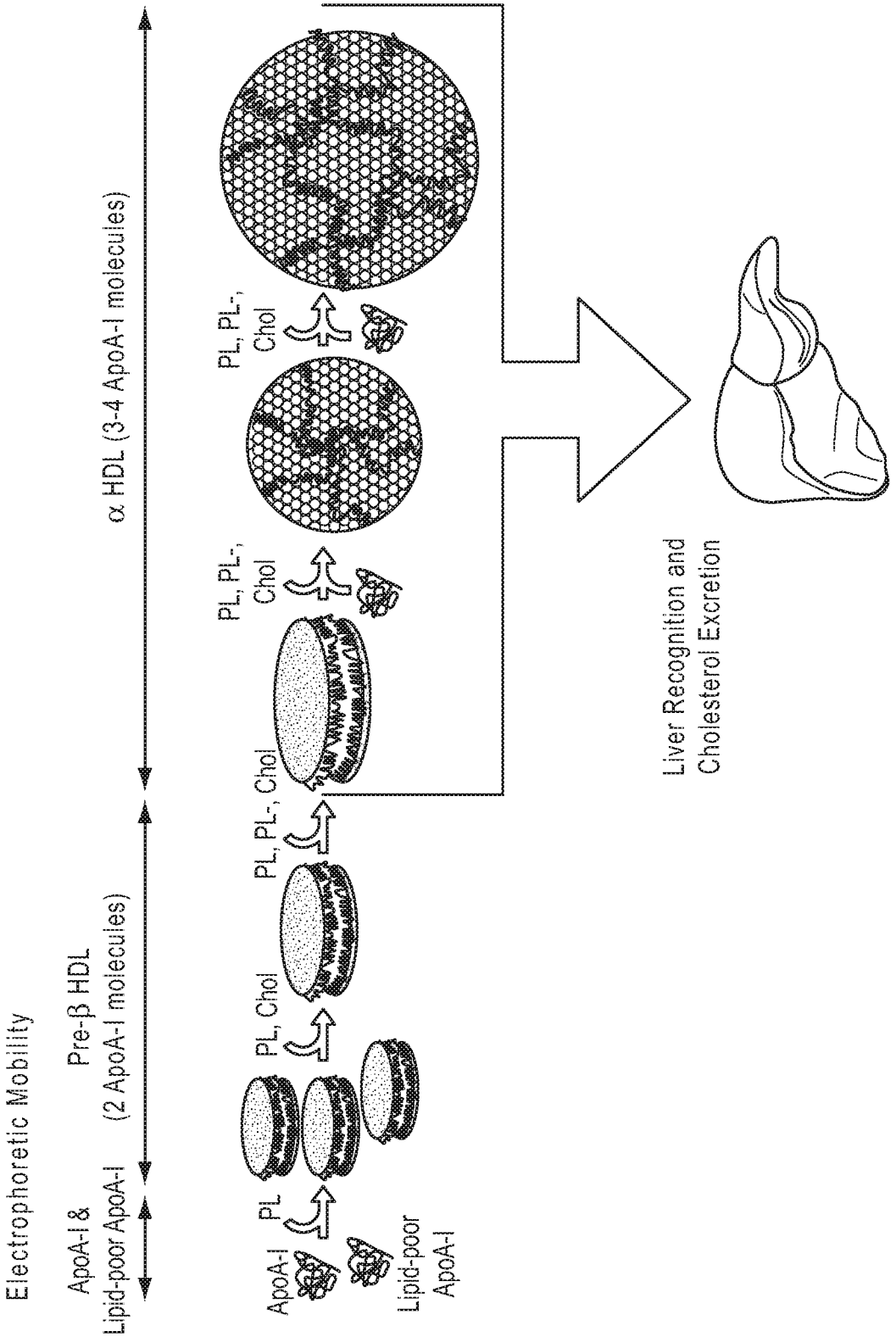

Electrophoretic Mobility
ApoA-I & Lipid-poor ApoA-I
Pre-β HDL (2 ApoA-I molecules)
α HDL (3-4 ApoA-I molecules)
ApoA-I
PL
Lipid-poor ApoA-I
PL, Chol
PL, PL-, Chol
PL, PL-, Chol
PL, PL-, Chol
Liver Recognition and Cholesterol Excretion

FIG. 61

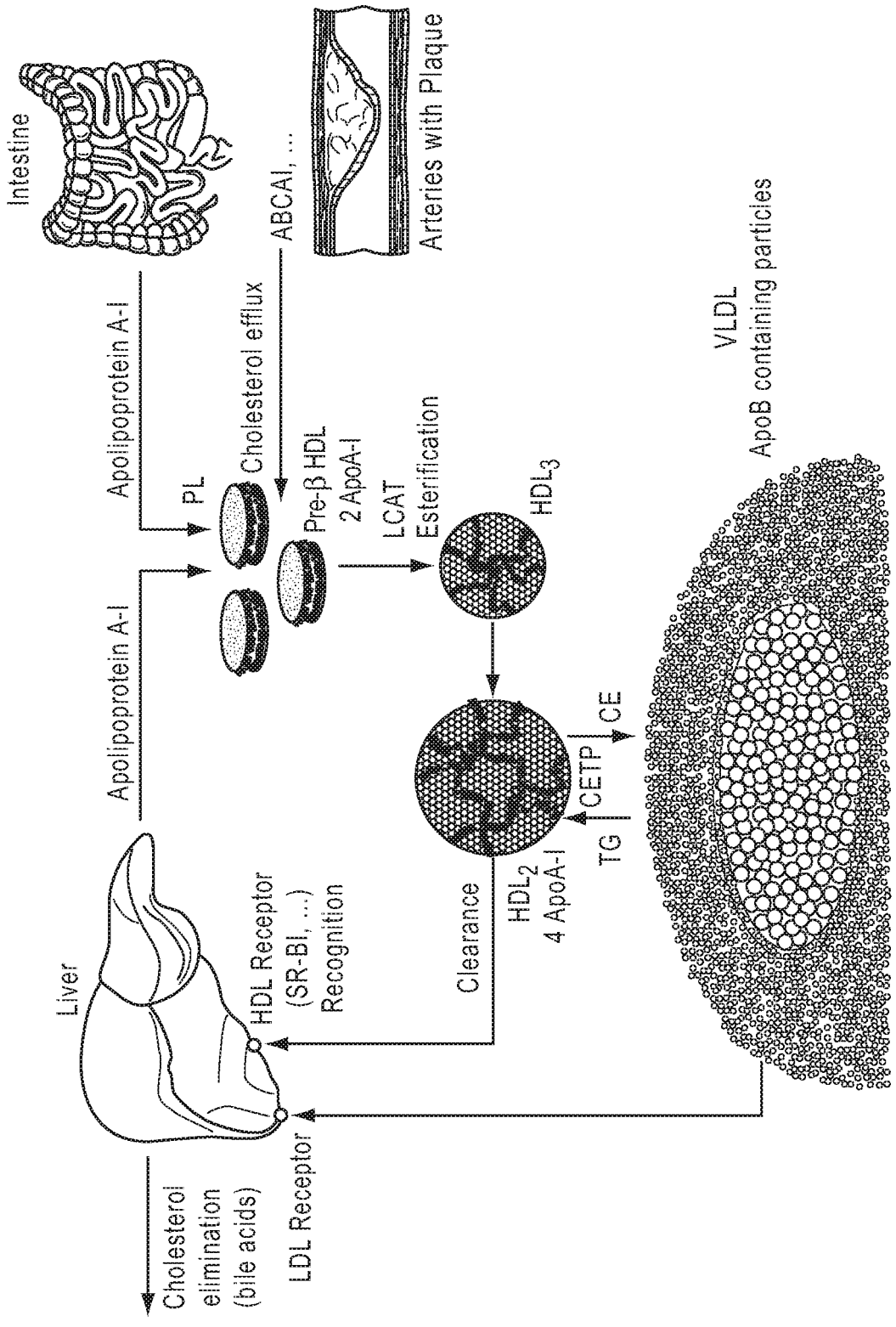

Intestine
Arteries with Plaque
ABCAI, ...
Apolipoprotein A-I
PL
Cholesterol efflux
Pre-β HDL
2 ApoA-I
LCAT
Esterification
HDL3
VLDL
ApoB containing particles
Apolipoprotein A-I
CE
CETP
TG
Liver
HDL Receptor
(SR-BI, ...)
Recognition
Clearance
HDL2
4 ApoA-I
Cholesterol
elimination
(bile acids)
LDL Receptor

FIG. 62

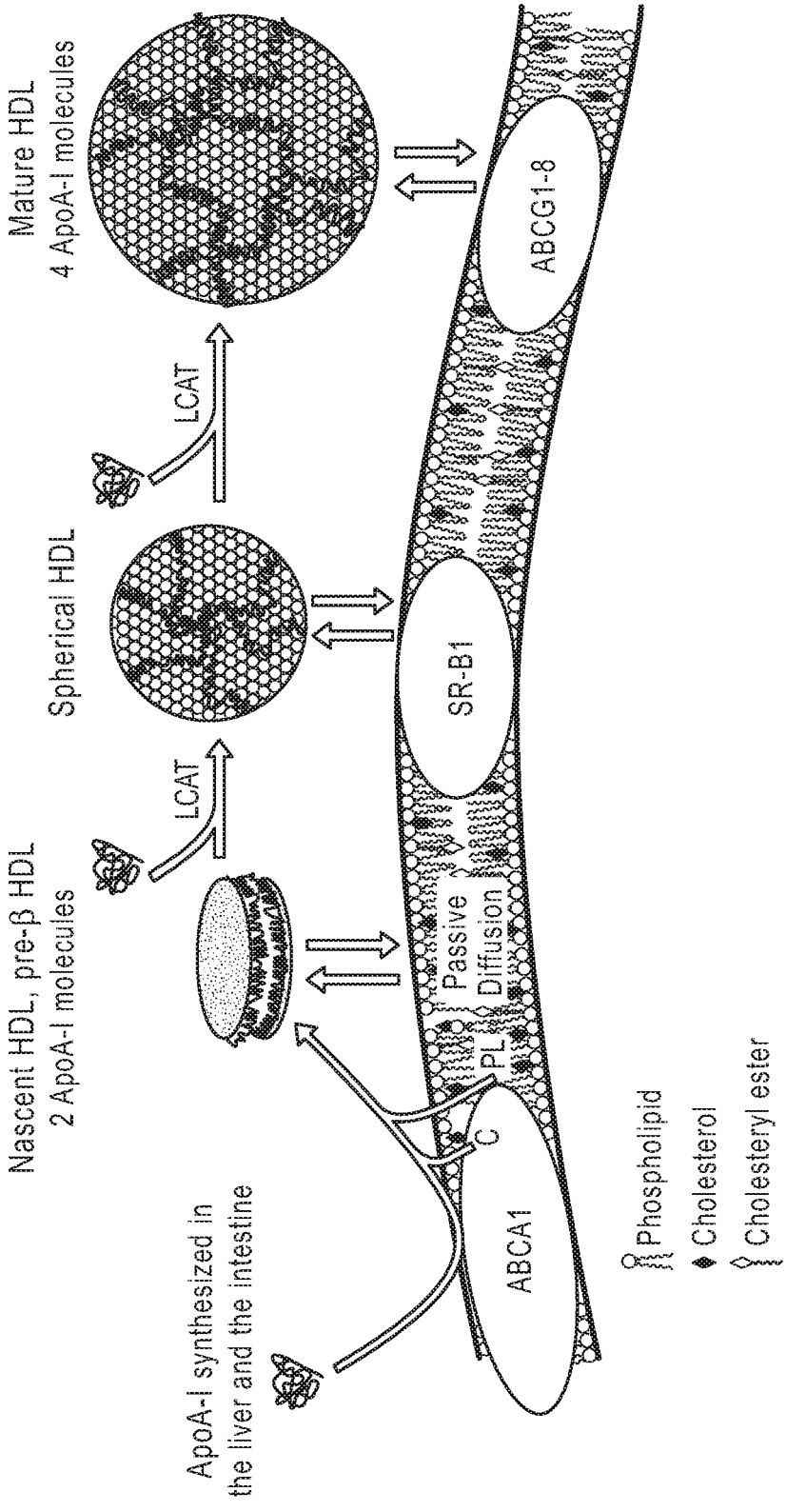

Nascent HDL, pre-β HDL
2 ApoA-I molecules
LCAT
Spherical HDL
LCAT
Mature HDL
4 ApoA-I molecules
SR-B1
ABCG1-8
ABCA1
Passive Diffusion
PL
C
ApoA-I synthesized in the liver and the intestine
Phospholipid
Cholesterol
Cholesteryl ester

FIG. 63

```
          1           2           3           4
1234567890 1234567890 1234567890 1234567890
MKAAVLTLAV LFLTGSQARH FWQQDEPPQS PWDRVKDLAT

          5           6           7           8
1234567890 1234567890 1234567890 1234567890
VYVDVLKDSG RDYVSQFEGS ALGKQLNLKL LDNWDSVTST
                    1           1           1
          9           0           1           2
1234567890 1234567890 1234567890 1234567890
FSKLREQLGP VTQEFWDNLE KETEGLRQEM SKDLEEVKAK
          1           1           1           1
          3           4           5           6
1234567890 1234567890 1234567890 1234567890
VQPYLDDFQK KWQEEMELYR QKVEPLRAEL QEGARQKLHE

          1           1           1           2
          7           8           9           0
1234567890 1234567890 1234567890 1234567890
LQEKLSPLGE EMRDRARAHV DALRTHLAPY SDELRQRLAA
          2           2           2           2
          1           2           3           4
1234567890 1234567890 1234567890 1234567890
RLEALKENGG ARLAEYHAKA TEHLSTLSEK AKPALEDLRQ
          2           2
          5           6
1234567890 1234567890 1234567
GLLPVLESFK VSFLSALEEY TKKLNTQ
```

FIG. 64

```
   1 atggcttgtt ggcctcagct gaggttgctg ctgtggaaga acctcacttt cagaagaaga
  61 caaacatgtc agctgctgct ggaagtggcc tggcctctat ttatcttcct gatcctgatc
 121 tctgttcggc tgagctaccc accctatgaa caacatgaat gccatttcc aaataaagcc
 181 atgccctctg caggaacact tccttgggtt caggggatta tctgtaatgc caacaacccc
 241 tgtttccgtt acccgactcc tggggaggct cccggagttg ttggaaactt taacaaatcc
 301 attgtggctc gcctgttctc agatgctcgg aggcttcttt tatacagcca gaaagacacc
 361 agcatgaagg acatgcgcaa agttctgaga acattacagc agatcaagaa atccagctca
 421 aacttgaagc ttcaagattt cctggtggac aatgaaacct tctctgggtt cctgtatcac
 481 aacctctctc tcccaaagtc tactgtggac aagatgctga gggctgatgt cattctccac
 541 aaggtatttt tgcaaggcta ccagttacat ttgacaagtc tgtgcaatgg atcaaaatca
 601 gaagagatga ttcaacttgg tgaccaagaa gtttctgagc tttgtggcct accaagggag
 661 aaactggctg cagcagagcg agtacttcgt tccaacatgg acatcctgaa gccaatcctg
 721 agaacactaa actctacatc tcccttcccg agcaaggagc tggctgaagc cacaaaaaca
 781 ttgctgcata gtcttgggac tctggcccag gagctgttca gcatgagaag ctggagtgac
 841 atgcgacagg aggtgatgtt tctgaccaat gtgaacagct ccagctcctc cacccaaatc
 901 taccaggctg tgtctcgtat tgtctgcggg catcccgagg gaggggggct gaagatcaag
 961 tctctcaact ggtatgagga caacaactac aaagccctct ttggaggcaa tggcactgag
1021 gaagatgctg aaaccttcta tgacaactct acaactcctt actgcaatga tttgatgaag
1081 aatttggagt ctagtcctct ttcccgcatt atctggaaag ctctgaagcc gctgctcgtt
1141 gggaagatcc tgtatacacc tgacactcca gccacaaggc aggtcatggc tgaggtgaac
1201 aagaccttcc aggaactggc tgtgttccat gatctggaag gcatgtggga ggaactcagc
1261 cccaagatct ggaccttcat ggagaacagc caagaaatgg accttgtccg gatgctgttg
1321 gacagcaggg acaatgacca cttttgggaa cagcagttgg atggcttaga ttggacagcc
1381 caagacatcg tggcgttttt ggccaagcac ccagaggatg tccagtccag taatggttct
1441 gtgtacacct ggagagaagc tttcaacgag actaaccagg caatccggac catatctcgc
1501 ttcatggagt gtgtcaacct gaacaagcta gaacccatag caacagaagt ctggctcatc
1561 aacaagtcca tggagctgct ggatgagagg aagttctggg ctggtattgt gttcactgga
1621 attactccag gcagcattga gctgccccat catgtcaagt acaagatccg aatggacatt
1681 gacaatgtgg agaggacaaa taaaatcaag gatgggtact gggaccctgg tcctcgagct
1741 gacccctttg aggacatgcg gtacgtctgg gggggcttcg cctacttgca ggatgtggtg
1801 gagcaggcaa tcatcagggt gctgacgggc accgagaaga aaactggtgt ctatatgcaa
1861 cagatgccct atccctgtta cgttgatgac atctttctgc gggtgatgag ccggtcaatg
1921 cccctcttca tgacgctggc ctggatttac tcagtggctg tgatcatcaa gggcatcgtg
1981 tatgagaagg aggcacggct gaaagagacc atgcggatca tgggcctgga caacagcatc
2041 ctctggttta gctggttcat tagtagcctc attcctcttc ttgtgagcgc tggcctgcta
2101 gtggtcatcc tgaagttagg aaacctgctg ccctacagtg atcccagcgt ggtgtttgtc
2161 ttcctgtccg tgtttgctgt ggtgacaatc ctgcagtgct tcctgattag cacactcttc
2221 tccagagcca acctggcagc agcctgtggg ggcatcatct acttcacgct gtacctgccc
2281 tacgtcctgt gtgtggcatg gcaggactac gtgggcttca cactcaagat cttcgctagc
2341 ctgctgtctc ctgtggcttt tgggtttggc tgtgagtact ttgccctttt tgaggagcag
2401 ggcattggag tgcagtggga caacctgttt gagagtcctg tggaggaaga tggcttcaat
2461 ctcaccactt cggtctccat gatgctgttt gacaccttcc tctatggggt gatgacctgg
2521 tacattgagg ctgtctttcc aggccagtac ggaattccca ggccctggta ttttccttgc
2581 accaagtcct actggtttgg cgaggaaagt gatgagaaga gccaccctgg ttccaaccag
```

FIG. 65A1

```
2641 aagagaatat cagaaatctg catggaggag gaacccaccc acttgaagct gggcgtgtcc
2701 attcagaacc tggtaaaagt ctaccgagat gggatgaagg tggctgtcga tggcctggca
2761 ctgaattttt atgagggcca gatcacctcc ttcctgggcc acaatggagc ggggaagacg
2821 accaccatgt caatcctgac cgggttgttc cccccgacct cgggcaccgc ctacatcctg
2881 ggaaaagaca ttcgctctga gatgagcacc atccggcaga acctgggggt ctgtccccag
2941 cataacgtgc tgtttgacat gctgactgtc gaagaacaca tctggttcta tgcccgcttg
3001 aaagggctct ctgagaagca cgtgaaggcg gagatggagc agatggccct ggatgttggt
3061 ttgccatcaa gcaagctgaa aagcaaaaca agccagctgt caggtggaat gcagagaaag
3121 ctatctgtgg ccttggcctt tgtcggggga tctaaggttg tcattctgga tgaacccaca
3181 gctggtgtgg acccttactc ccgcagggga atatgggagc tgctgctgaa ataccgacaa
3241 ggccgcacca ttattctctc tacacaccac atggatgaag cggacgtcct gggggacagg
3301 attgccatca tctcccatgg gaagctgtgc tgtgtgggct cctccctgtt tctgaagaac
3361 cagctgggaa caggctacta cctgaccttg gtcaagaaag atgtggaatc ctccctcagt
3421 tcctgcagaa acagtagtag cactgtgtca tacctgaaaa aggaggacag tgtttctcag
3481 agcagttctg atgctggcct gggcagcgac catgagagtg acacgctgac catcgatgtc
3541 tctgctatct ccaacctcat caggaagcat gtgtctgaag cccggctggt ggaagacata
3601 gggcatgagc tgacctatgt gctgccatat gaagctgcta aggagggagc ctttgtggaa
3661 ctctttcatg agattgatga ccggctctca gacctgggca tttctagtta tggcatctca
3721 gagacgaccc tggaagaaat attcctcaag gtggccgaag agagtggggt ggatgctgag
3781 acctcagatg gtaccttgcc agcaagacga aacaggcggg ccttcgggga caagcagagc
3841 tgtcttcgcc cgttcactga agatgatgct gctgatccaa atgattctga catagaccca
3901 gaatccagag agacagactt gctcagtggg atggatggca aagggtccta ccaggtgaaa
3961 ggctggaaac ttacacagca acagtttgtg gccctttgt ggaagagact gctaattgcc
4021 agacggagtc ggaaaggatt ttttgctcag attgtcttgc cagctgtgtt tgtctgcatt
4081 gcccttgtgt tcagcctgat cgtgccaccc tttggcaagt accccagcct ggaacttcag
4141 ccctggatgt acaacgaaca gtacacattt gtcagcaatg atgctcctga ggacacggga
4201 accctggaac tcttaaacgc cctcaccaaa gaccctggct tcgggacccg ctgtatggaa
4261 ggaaacccaa tcccagacac gccctgccag gcaggggagg aagagtggac cactgcccca
4321 gttccccaga ccatcatgga cctcttccag aatgggaact ggacaatgca gaacccttca
4381 cctgcatgcc agtgtagcag cgacaaaatc aagaagatgc tgcctgtgtg tcccccaggg
4441 gcaggggggc tgcctcctcc acaaagaaaa caaaacactg cagatatcct tcaggacctg
4501 acaggaagaa acatttcgga ttatctggtg aagacgtatg tgcagatcat agccaaaagc
4561 ttaaagaaca agatctgggt gaatgagttt aggtatggcg gcttttccct gggtgtcagt
4621 aatactcaag cacttcctcc gagtcaagaa gttaatgatg ccatcaaaca aatgaagaaa
4681 cacctaaagc tggccaagga cagttctgca gatcgatttc tcaacagctt gggaagattt
4741 atgacaggac tggacaccaa aaataatgtc aaggtgtggt tcaataacaa gggctggcat
4801 gcaatcagct ctttcctgaa tgtcatcaac aatgccattc tccgggccaa cctgcaaaag
4861 ggagagaacc ctagccatta tggaattact gctttcaatc atcccctgaa tctcaccaag
4921 cagcagctct cagaggtggc tctgatgacc acatcagtgg atgtccttgt gtccatctgt
4981 gtcatctttg caatgtcctt cgtcccagcc agctttgtcg tattcctgat ccaggagcgg
5041 gtcagcaaag caaaacacct gcagttcatc agtggagtga agcctgtcat ctactggctc
5101 tctaattttg tctgggatat gtgcaattac gttgtccctg ccacactggt cattatcatc
5161 ttcatctgct tccagcagaa gtcctatgtg tcctccacca atctgcctgt gctagccctt
5221 ctacttttgc tgtatgggtg gtcaatcaca cctctcatgt acccagcctc ctttgtgttc
```

FIG. 65A2

```
5281 aagatcccca gcacagccta tgtggtgctc accagcgtga acctcttcat tggcattaat
5341 ggcagcgtgg ccacctttgt gctggagctg ttcaccgaca ataagctgaa taatatcaat
5401 gatatcctga agtccgtgtt cttgatcttc ccacattttt gcctgggacg agggctcatc
5461 gacatggtga aaaaccaggc aatggctgat gccctggaaa ggtttgggga gaatcgcttt
5521 gtgtcaccat tatcttggga cttggtggga cgaaacctct tcgccatggc cgtggaaggg
5581 gtggtgttct tcctcattac tgttctgatc cagtacagat tcttcatcag gcccagacct
5641 gtaaatgcaa agctatctcc tctgaatgat gaagatgaag atgtgaggcg ggaaagacag
5701 agaattcttg atggtggagg ccagaatgac atcttagaaa tcaaggagtt gacgaagata
5761 tatagaagga agcggaagcc tgctgttgac aggatttgcg tgggcattcc tcctggtgag
5821 tgctttgggc tcctgggagt taatggggct ggaaaatcat caactttcaa gatgttaaca
5881 ggagatacca ctgttaccag aggagatgct ttccttaaca aaaatagtat cttatcaaac
5941 atccatgaag tacatcagaa catgggctac tgccctcagt ttgatgccat cacagagctg
6001 ttgactggga gagaacacgt ggagttcttt gccctttga gaggagtccc agagaaagaa
6061 gttggcaagg ttggtgagtg ggcgattcgg aaactgggcc tcgtgaagta tggagaaaaa
6121 tatgctggta actatagtgg aggcaacaaa cgcaagctct ctacagccat ggctttgatc
6181 ggcgggcctc ctgtggtgtt tctggatgaa cccaccacag gcatggatcc caaagcccgg
6241 cggttcttgt ggaattgtgc cctaagtgtt gtcaaggagg ggagatcagt agtgcttaca
6301 tctcatagta tggaagagtg tgaagctctt tgcactagga tggcaatcat ggtcaatgga
6361 aggttcaggt gccttggcag tgtccagcat ctaaaaaata ggtttggaga tggttataca
6421 atagttgtac gaatagcagg gtccaacccg gacctgaagc ctgtccagga tttctttgga
6481 cttgcatttc ctggaagtgt tctaaaagag aaacaccgga acatgctaca ataccagctt
6541 ccatcttcat tatcttctct ggccaggata ttcagcatcc tctcccagag caaaaagcga
6601 ctccacatag aagactactc tgtttctcag acaacacttg accaagtatt tgtgaacttt
6661 gccaaggacc aaagtgatga tgaccactta aaagacctct cattacacaa aaaccagaca
6721 gtagtggacg ttgcagttct cacatctttt ctacaggatg agaaagtgaa agaaagctat
6781 gtatga
```

FIG. 65A3

```
   1 macwpqlrll lwknltfrrr qtcqllleva wplfiflili svrlsyppye qhechfpnka
  61 mpsagtlpwv qgiicnannp cfryptpgea pgvvgnfnks ivarlfsdar rlllysqkdt
 121 smkdmrkvlr tlqqikksss nlklqdflvd netfsgflyh nlslpkstvd kmlradvilh
 181 kvflqgyqlh ltslcngsks eemiqlgdqe vselcglpre klaaaervlr snmdilkpil
 241 rtlnstspfp skelaeatkt llhslgtlaq elfsmrswsd mrqevmfltn vnsssstqi
 301 yqavsrivcg hpeggglkik slnwyednny kalfggngte edaetfydns ttpycndlmk
 361 nlessplsri iwkalkpllv gkilytpdtp atrqvmaevn ktfqelavfh dlegmweels
 421 pkiwtfmens qemdlvrmll dsrdndhfwe qqldgldwta qdivaflakh pedvqssngs
 481 vytwreafne tnqairtisr fmecvnlnkl epiatevwli nksmellder kfwagivftg
 541 itpgsielph hvkykirmdi dnvertnkik dgywdpgpra dpfedmryvw ggfaylqdvv
 601 eqaiirvltg tekktgvymq qmpypcyvdd iflrvmsrsm plfmtlawiy svaviikgiv
 661 yekearlket mrimgldnsi lwfswfissl ipllvsagll vvilklgnll pysdpsvvfv
 721 flsvfavvti lqcflistlf sranlaaacg giiyftlylp yvlcvawqdy vgftlkifax
 781 llspvafgfg ceyfalfeeq gigvqwdnlf espveedgfn lttsvsmmlf dtflygvmtw
 841 yieavfpgqy giprpwyfpc tksywfgees dekshpgsnq kriseicmee epthlklgvs
 901 iqnlvkvyrd gmkvavdgla lnfyegqits flghngagkt ttmsiltglf pptsgtayil
 961 gkdirsemst irqnlgvcpq hnvlfdmltv eehiwfyarl kglsekhvka emeqmaldvg
1021 lpssklkskt sqlsggmqrk lsvalafvgg skvvildept agvdpysrrg iwelllkyrq
1081 grtiilsthh mdeadvlgdr iaiishgklc cvgsslflkn qlgtgyyltl vkkdvessls
1141 scrnssstvs ylkkedsvsq sssdaglgsd hesdtltidv saisnlirkh vsearlvedi
1201 gheltyvlpy eaakegafve lfheiddrls dlgissygis ettleeiflk vaeesgvdae
1261 tsdgtlparr nrrafgdkqs clrpftedda adpndsdidp esretdllsg mdgkgsyqvk
1321 gwkltqqqfv allwkrllia rrsrkgffaq ivlpavfvci alvfslivpp fgkypslelq
1381 pwmyneqytf vsndapedtg tlellnaltk dpgfgtrcme gnpipdtpcq ageeewttap
1441 vpqtimdlfq ngnwtmqnps pacqcssdki kkmlpvcppg agglpppqrk qntadilqdl
1501 tgrnisdylv ktyvqiiaks lknkiwvnef ryggfslgvs ntqalppsqe vndaxkqmkk
1561 hlklakdssa drflnslgrf mtgldtrnnv kvwfnnkgwh aissflnvin nailranlqk
1621 genpshygit afnhplnltk qqlsevaxmt tsvdvlvsic vifamsfvpa sfvvfliqer
1681 vskakhlqfi sgvkpviywl snfvwdmcny vvpatlviii ficfqqksyv sstnlpvlal
1741 llllygwsit plmypasfvf kipstayvvl tsvnlfigin gsvatfvlel ftdnklnnin
1801 dilksvflif phfclgrgli dmvknqamad alerfgenrf vsplswdlvg rnlfamaveg
1861 vvfflitvli qyrffirprp vnaklsplnd ededvrrerq rildgggqnd ileikeltki
1921 yrrkrkpavd ricvgippge cfgllgvnga gksstfkmlt gdttvtrgda flnxnsilsn
1981 ihevhqnmgy cpqfdaitel ltgrehveff allrgvpeke vgkvgewair klglvkygek
2041 yagnysggnk rklstamali ggppvvflde pttgmdpkar rflwncalsv vkegrsvvlt
2101 shsmeeceal ctrmaimvng rfrclgsvqh lknrfgdgyt ivvriagsnp dlkpvqdffg
2161 lafpgsvxke khrnmlqyql psslsslari fsilsqskkr lhiedysvsq ttldqvfvnf
2221 akdqsdddhl kdlslhknqt vvdvavltsf lqdekvkesy v
```

FIG. 65B

```
   1 gctttataaa ggggagtttc cctgcacaag ctctctctct tgtctgccgc catgtgagac
  61 atgcctttca ccttccgcca tgatcatgag gcttccccag ccacatggaa ctaatgccag
 121 cagttactct gcagagatga cggagcccaa gtcggtgtgt gtctcggtgg atgaggtggt
 181 gtccagcaac atggaggcca ctgagacgga cctgctgaat ggacatctga aaaaagtaga
 241 taataacctc acggaagccc agcgcttctc ctccttgcct cggagggcag ctgtgaacat
 301 tgaattcagg gacctttcct attcggttcc tgaaggaccc tggtggagga agaaaggata
 361 caagaccctc ctgaaaggaa tttccgggaa gttcaatagt ggtgagttgg tggccattat
 421 gggtccttcc ggggccggga agtccacgct gatgaacatc ctggctggat acagggagac
 481 gggcatgaag ggggccgtcc tcatcaacgg cctgccccgg gacctgcgct gcttccggaa
 541 ggtgtcctgc tacatcatgc aggatgacat gctgctgccg catctcactg tgcaggaggc
 601 catgatggtg tcggcacatc tgaagcttca ggagaaggat gaaggcagaa gggaaatggt
 661 caaggagata ctgacagcgc tgggcttgct gtcttgcgcc aacacgcgga ccgggagcct
 721 gtcaggtggt cagcgcaagc gcctggccat cgcgctggag ctggtgaaca accctccagt
 781 catgttcttc gatgagccca ccagcggcct ggacagcgcc tcctgcttcc aggtggtctc
 841 gctgatgaaa gggctcgctc aaggggtcg ctccatcatt tgcaccatcc accagcccag
 901 cgccaaactc ttcgagctgt tcgaccagct ttacgtcctg agtcaaggac aatgtgtgta
 961 ccggggaaaa gtctgcaatc ttgtgccata tttgagggat ttgggtctga actgcccaac
1021 ctaccacaac ccagcagatt ttgtcatgga ggttgcatcc ggcgagtacg gtgatcagaa
1081 cagtcggctg gtgagagcgg ttcgggaggg catgtgtgac tcagaccaca agagagacct
1141 cgggggtgat gccgaggtga acccttttct ttggcaccgg ccctctgaag aggactcctc
1201 gtccatggaa ggctgccaca gcttctctgc cagctgcctc acgcagttct gcatcctctt
1261 caagaggacc ttcctcagca tcatgaggga ctcggtcctg acacacctgc gcatcacctc
1321 gcacattggg atcggcctcc tcattggcct gctgtacttg gggatcggga acgaagccaa
1381 gaaggtcttg agcaactccg gcttcctctt cttctccatg ctgttcctca tgttcgcggc
1441 cctcatgcct actgttctga catttccccc ggagatggga gtctttcttc gggaacacct
1501 gaactactgg tacagcctga aggcctacta cctggccaag accatggcag acgtgccctt
1561 tcagatcatg ttcccagtgg cctactgcag catcgtgtac tggatgacgt cgcagccgtc
1621 cgacgccgtg cgctttgtgc tgtttgccgc gctgggcacc atgacctccc tggtggcaca
1681 gtccctgggc ctgctgatcg gagccgcctc cacgtccctg caggtggcca ctttcgtggg
1741 cccagtgaca gccatcccgg tgctcctgtt ctcggggttc ttcgtcagct tcgacaccat
1801 ccccacgtac ctacagtgga tgtcctacat ctcctatgtc aggtatgggt tcgaaggggt
1861 catcctctcc atctatggct tagaccggga agatctgcac tgtgacatcg acgagacgtg
1921 ccacttccag aagtcggagg ccatcctgcg ggagctggac gtggaaaatg ccaagctgta
1981 cctggacttc atcgtactcg ggattttctt catctccctc cgcctcattg cctatttgt
2041 cctcaggtac aaaatccggg cagagaggta aaacacctga atgccaggaa acaggaagat
2101 tagacactgt ggccgagggc acgtctagaa tcgaggaggc aagcctgtgc ccgaccgacg
2161 acacagagac tcttctgatc caacccctag aaccgcgttg ggtttgtggg tgtctcgtgc
2221 tcagccactc tgcccagctg ggttggatct tctctccatt ccccttttcta gctttaacta
2281 ggaagatgta ggcagattgg tggttttttt ttttttaaca tacagaattt taaataccac
2341 aactggggca gaatttaaag ctgcaacaca gctggtgatg agaggcttcc tcagtccagt
2401 cgctccttag caccaggcac cgtgggtcct ggatggggaa ctgcaagcag cctctcagct
2461 gatggctgca cagtcagatg tctggtggca gagagtccga gcatggagcg attccatttt
2521 atgactgttg tttttcacat tttcatcttt ctaaggtgtg tctcttttcc aatgagaagt
2581 catttttgca agccaaaagt cgatcaatcg cattcatttt aagaaattat acctttttag
```

FIG. 66A1

```
2641 tacttgctga agaatgattc agggtaaatc acatactttg tttagagagg cgaggggttt
2701 aaccgagtca cccagctggt ctcatacata gacagcactt gtgaaggatt gaatgcaggt
2761 tccaggtgga gggaagacgt ggacaccatc tccactgagc catgcagaca tttttaaaag
2821 ctatacaaaa aattgtgaga agacattggc caactctttc aaagtctttc ttttccacg
2881 tgcttcttat tttaagcgaa atatattgtt tgtttcttcc taaaaaaaaa aaaaaaaaaa
2941 aaaaaa
```

FIG. 66A2

```
   1 maclmaafsv gtamnassys aemtepksvc vsvdevvssn meatetdlln ghlkkvdnnl
  61 teaqrfsslp rraavniefr dlsysvpegp wwrkkgyktl lkgisgkfns gelvaimgps
 121 gagkstlmni lagyretgmk gavlinglpr dlrcfrkvsc yimqddmllp hltvqeammv
 181 sahlklqekd egrremvkei ltalgllsca ntrtgslsgg qrkrlaiale lvnnppvmff
 241 deptsgldsa scfqvvslmk glaqggrsii ctihqpsakl felfdqlyvl sqgqcvyrgk
 301 vcnlvpylrd lglncptyhn padfvmevas geygdqnsrl vravregmcd sdhkrdlggd
 361 aevnpflwhr pseevkqtkr lkglrkdsss megchsfsas cltqfcilfk rtflsimrds
 421 vlthlritsh igiglligll ylgigneakk vlsnsgflff smlflmfaal mptvltfple
 481 mgvflrehln ywyslkayyl aktmadvpfq imfpvaycsi vywmtsqpsd avrfvlfaal
 541 gtmtslvaqs lglligaast slqvatfvgp vtaipvllfs gffvsfdtip tylqwmsyis
 601 yvrygfegvi lsiygldred lhcdidetch fqkseailre ldvenaklyl dfivlgiffi
 661 slrliayfvl rykiraer
```

FIG. 66B

```
   1 agtttccgag gaacttttcg ccggcgccgg gccgcctctg aggccagggc aggacacgaa
  61 cgcgcggagc ggcggcggcg actgagagcc ggggccgcgg cggcgctccc taggaagggc
 121 cgtacgaggc ggcgggcccg gcgggcctcc cggaggaggc ggctgcgcca tggacgagcc
 181 acccttcagc gaggcggctt tggagcaggc gctgggcgag ccgtgcgatc tggacgcggc
 241 gctgctgacc gacatcgaag gtgaagtcgg cgcggggagg ggtagggcca acggcctgga
 301 cgccccaagg gcgggcgcag atcgcggagc catggattgc actttcgaag acatgcttca
 361 gcttatcaac aaccaagaca gtgacttccc tggcctattt gacccaccct atgctgggag
 421 tggggcaggg ggcacagacc ctgccagccc cgataccagc tccccaggca gcttgtctcc
 481 acctcctgcc acattgagct cctctcttga agccttcctg agcgggccgc aggcagcgcc
 541 ctcacccctg tcccctcccc agcctgcacc cactccattg aagatgtacc cgtccatgcc
 601 cgctttctcc cctgggcctg gtatcaagga agagtcagtg ccactgagca tcctgcagac
 661 ccccacccca cagcccctgc caggggccct cctgccacag agcttcccag ccccagcccc
 721 accgcagttc agctccaccc ctgtgttagg ctaccccagc cctccgggag gcttctctac
 781 aggaagccct cccgggaaca cccagcagcc gctgcctggc ctgccactgg cttccccgcc
 841 aggggtcccg cccgtctcct tgcacaccca ggtccagagt gtggtccccc agcagctact
 901 gacagtcaca gctgccccca cggcagcccc tgtaacgacc actgtgacct cgcagatcca
 961 gcaggtcccg gtcctgctgc agccccactt catcaaggca gactcgctgc ttctgacagc
1021 catgaagaca gacggagcca ctgtgaaggc ggcaggtctc agtcccctgg tctctggcac
1081 cactgtgcag acagggcctt tgccgaccct ggtgagtggc ggaaccatct tggcaacagt
1141 cccactggtc gtagatgcgg agaagctgcc tatcagccgg ctcgcagctg gcagcaaggc
1201 cccggcctct gcccagagcc gtggagagaa gcgcacagcc cacaacgcca ttgagaagcg
1261 ctaccgctcc tccatcaatg acaaaatcat tgagctcaag gatctggtgg tgggcactga
1321 ggcaaagctg aataaatctg ctgtcttgcg caaggccatc gactacattc gctttctgca
1381 acacagcaac cagaaactca agcaggagaa cctaagtctg cgcactgctg tccacaaaag
1441 caaatctctg aaggatctgg tgtcggcctg tggcagtgga gggaacacag acgtgctcat
1501 ggagggcgtg aagactgagg tggaggacac actgacccca ccccctcgg atgctggctc
1561 acctttccag agcagcccct tgtcccttgg cagcaggggc agtggcagcg gtggcagtgg
1621 cagtgactcg gagcctgaca gcccagtctt tgaggacagc aaggcaaagc cagagcagcg
1681 gccgtctctg cacagccggg gcatgctgga ccgctcccgc ctggccctgt gcacgctcgt
1741 cttcctctgc ctgtcctgca acccccttggc ctccttgctg ggggcccggg ggcttcccag
1801 cccctcagat accaccagcg tctaccatag ccctgggcgc aacgtgctgg gcaccgagag
1861 cagagatggc cctggctggg cccagtggct gctgccccca gtggtctggc tgctcaatgg
1921 gctgttggtg ctcgtctcct tggtgcttct ctttgtctac ggtgagccag tcacacggcc
1981 ccactcaggc cccgccgtgt acttctggag gcatcgcaag caggctgacc tggacctggc
2041 ccggggagac tttgcccagg ctgcccagca gctgtggctg gccctgcggg cactgggccg
2101 gcccctgccc acctcccacc tggacctggc ttgtagcctc ctctggaacc tcatccgtca
2161 cctgctgcag cgtctctggg tgggccgctg gctggcaggc cgggcagggg gcctgcagca
2221 ggactgtgct ctgcgagtgg atgctagcgc cagcgcccga gacgcagccc tggtctacca
2281 taagctgcac cagctgcaca ccatggggaa gcacacaggc gggcacctca ctgccaccaa
2341 cctggcgctg agtgccctga acctggcaga gtgtgcaggg gatgccgtgt ctgtggcgac
2401 gctggccgag atctatgtgg cggctgcatt gagagtgaag accagtctcc cacgggcctt
2461 gcattttctg acacgcttct tcctgagcag tgcccgccag gcctgcctgg cacagagtgg
2521 ctcagtgcct cctgccatgc agtggctctg ccaccccgtg ggccaccgtt tcttcgtgga
2581 tggggactgg tccgtgctca gtaccccatg ggagagcctg tacagcttgg ccgggaaccc
```

FIG. 67A1

2641 agtggacccc ctggcccagg tgactcagct attccgggaa catctcttag agcgagcact
2701 gaactgtgtg acccagccca accccagccc tgggtcagct gatggggaca aggaattctt
2761 ggatgccctc gggtacctgc agctgctgaa cagctgttct gatgctgcgg gggctcctgc
2821 ctacagcttc tccatcagtt ccagcatggc caccaccacc ggcgtagacc cggtggccaa
2881 gtggtgggcc tctctgacag ctgtggtgat ccactggctg cggcgggatg aggaggcggc
2941 tgagcggctg tgcccgctgg tggagcacct gccccgggtg ctgcaggagt ctgagagacc
3001 cctgcccagg gcagctctgc actccttcaa ggctgcccgg gccctgctgg gctgtgccaa
3061 ggcagagtct ggtccagcca gcctgaccat ctgtgagaag gccagtgggt acctgcagga
3121 cagcctggct accacaccag ccagcagctc cattgacaag gccgtgcagc tgttcctgtg
3181 tgacctgctt cttgtggtgc gcaccagcct gtggcggcag cagcagcccc cggccccggc
3241 cccagcagcc cagggcacca gcagcaggcc ccaggcttcc gcccttgagc tgcgtggctt
3301 ccaacgggac ctgagcagcc tgaggcggct ggcacagagc ttccggcccg ccatgcggag
3361 ggtgttccta catgaggcca cggcccggct gatggcgggg gccagcccca cacggacaca
3421 ccagctcctc gaccgcagtc tgaggcggcg ggcaggcccc ggtggcaaag gaggcgcggt
3481 ggcggagctg gagccgcggc ccacgcggcg ggagcacgcg gaggccttgc tgctggcctc
3541 ctgctacctg ccccccggct tcctgtcggc gcccgggcag cgcgtgggca tgctggctga
3601 ggcggcgcgc acactcgaga agcttggcga tcgccggctg ctgcacgact gtcagcagat
3661 gctcatgcgc ctgggcggtg ggaccactgt cacttccagc tagaccccgt gtccccggcc
3721 tcagcacccc tgtctctagc cactttggtc ccgtgcagct tctgtcctgc gtcgaagctt
3781 tgaaggccga aggcagtgca agagactctg gcctccacag ttcgacctgc ggctgctgtg
3841 tgccttcgcg gtggaaggcc cgaggggcgc gatcttgacc ctaagaccgg cggccatgat
3901 ggtgctgacc tctggtggcc gatcggggca ctgcaggggc cgagccattt tgggggccc
3961 ccctccttgc tctgcaggca ccttagtggc ttttttcctc ctgtgtacag ggaagagagg
4021 ggtacatttc cctgtgctga cggaagccaa cttggctttc ccggactgca agcagggctc
4081 tgccccagag gcctctctct ccgtcgtggg agagagacgt gtacatagtg taggtcagcg
4141 tgcttagcct cctgacctga ggctcctgtg ctactttgcc ttttgcaaac tttatttca
4201 tagattgaga agttttgtac agagaattaa aaatgaaatt atttataaaa aaaaaaaaaa
4261 aa

FIG. 67A2

```
   1 mdeppfseaa leqalgepcd ldaalltdie dmlqlinnqd sdfpglfdpp yagsgaggtd
  61 paspdtsspg slspppatls ssleaflsgp qaapsplspp qpaptplkmy psmpafspgp
 121 gikeesvpls ilqtptpqpl pgallpqsfp apappqfsst pvlgypsppg gfstgsppgn
 181 tqqplpglpl asppgvppvs lhtqvqsvvp qqlltvtaap taapvtttvt sqiqqvpvll
 241 qphfikadsl lltamktdga tvkaaglspl vsgttvqtgp lptlvsggti latvplvvda
 301 eklpinrlaa gskapasaqs rgekrtahna iekryrssin dkiielkdlv vgteaklnks
 361 avlrkaidyi rflqhsnqkl kqenlslrta vhkskslkdl vsacgsggnt dvlmegvkte
 421 vedtltppps dagspfqssp lslgsrgsgs ggsgsdsepd spvfedskak peqrpslhsr
 481 gmldrsrlal ctlvflclsc nplasllgar glpspsdtts vyhspgrnvl gtesrdgpgw
 541 aqwllppvvw llngllvlvs lvllfvygep vtrphsgpav yfwrhrkqad ldlargdfaq
 601 aaqqlwlalr algrplptsh ldlacsllwn lirhllqrlw vgrwlagrag glqqdcalrv
 661 dasasardaa lvyhklhqlh tmgkhtgghl tatnlalsal nlaecagdav svatlaeiyv
 721 aaalrvktsl pralhfltrf flssarqacl aqsgsvppam qwlchpvghr ffvdgdwsvl
 781 stpweslysl agnpvdplaq vtqlfrehll eralncvtqp npspgsadgd kefsdalgyl
 841 qllnscsdaa gapaysfsis ssmatttgvd pvakwwaslt avvihwlrrd eeaaerlcpl
 901 vehlprvlqe serplpraal hsfkaarall gcakaesgpa slticekasg ylqdslattp
 961 asssidkavq lflcdlllvv rtslwrqqqp papapaaqgt ssrpqasale lrgfqrdlss
1021 lrrlaqsfrp amrrvflhea tarlmagasp trthqlldrs lrrragpggk ggavaelepr
1081 ptrrehaeal llascylppg flsapgqrvg mlaeaartle klgdrrllhd cqqmlmrlgg
1141 gttvtss
```

FIG. 67B

FIG. 68A

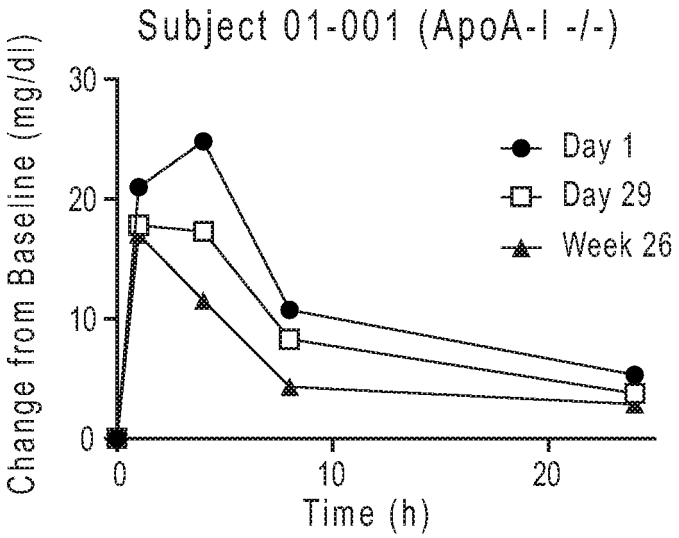


FIG. 68B

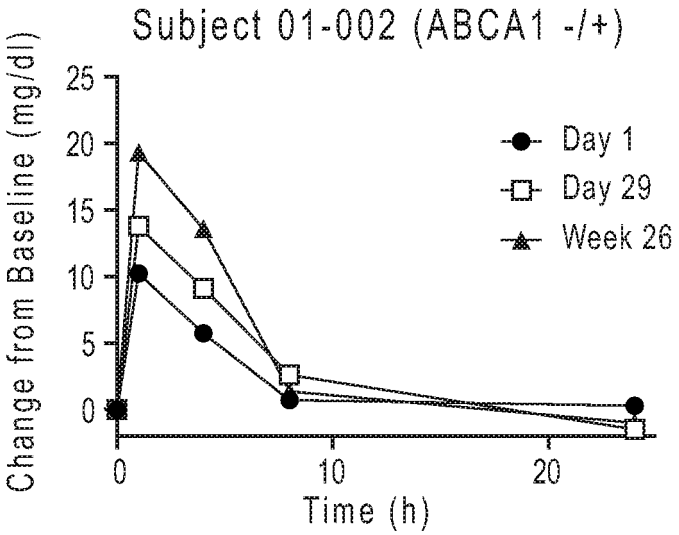


FIG. 68C

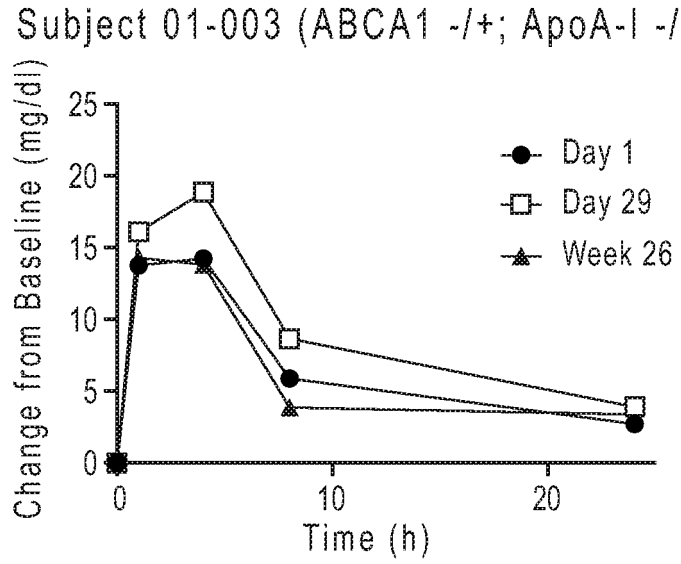


FIG. 68D

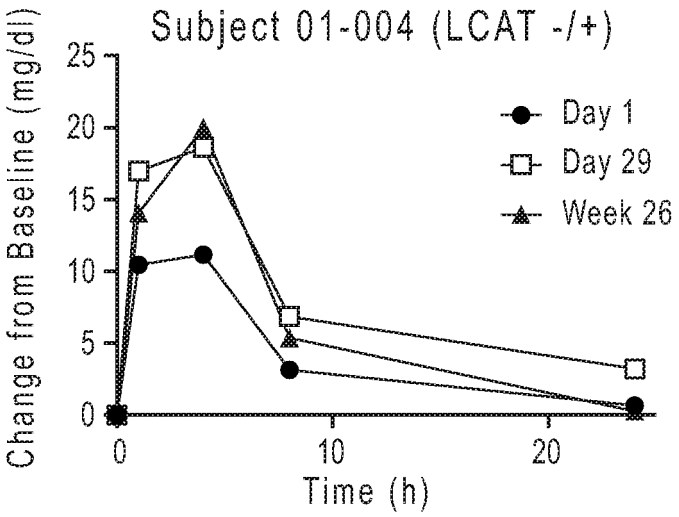


FIG. 68E

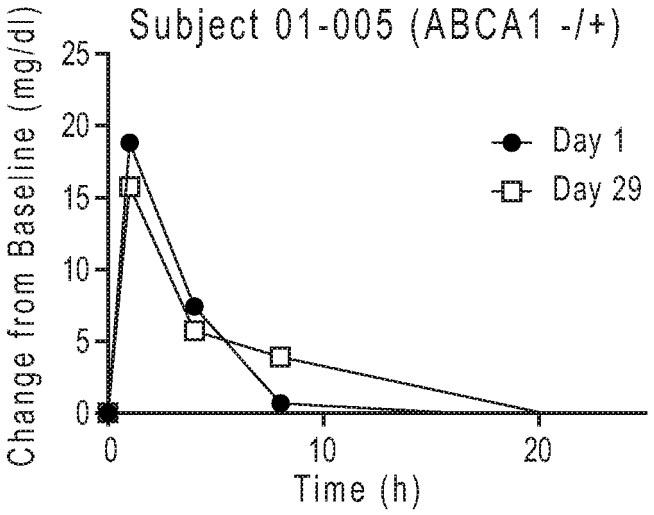
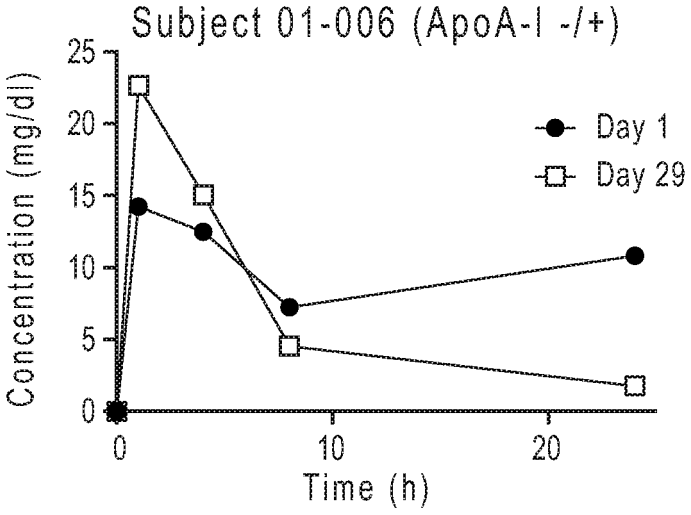


FIG. 68F



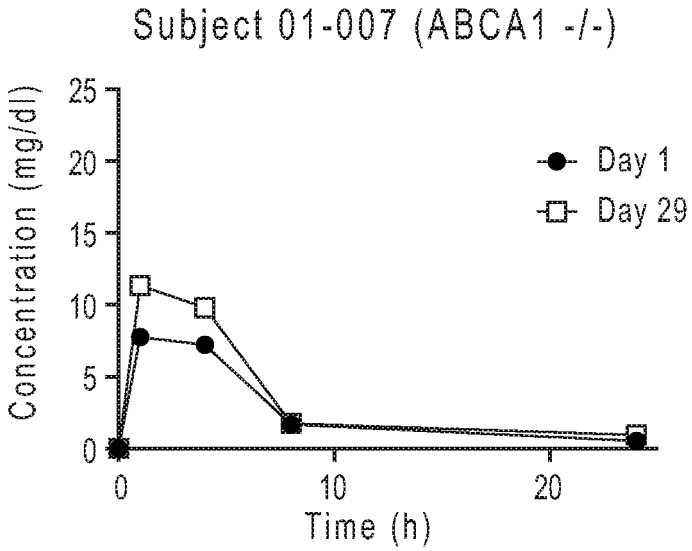

Subject 01-007 (ABCA1 -/-)
Concentration (mg/dl)
25
20
15
10
5
0
0
10
20
Time (h)
Day 1
Day 29

FIG. 68G

FIG. 69A

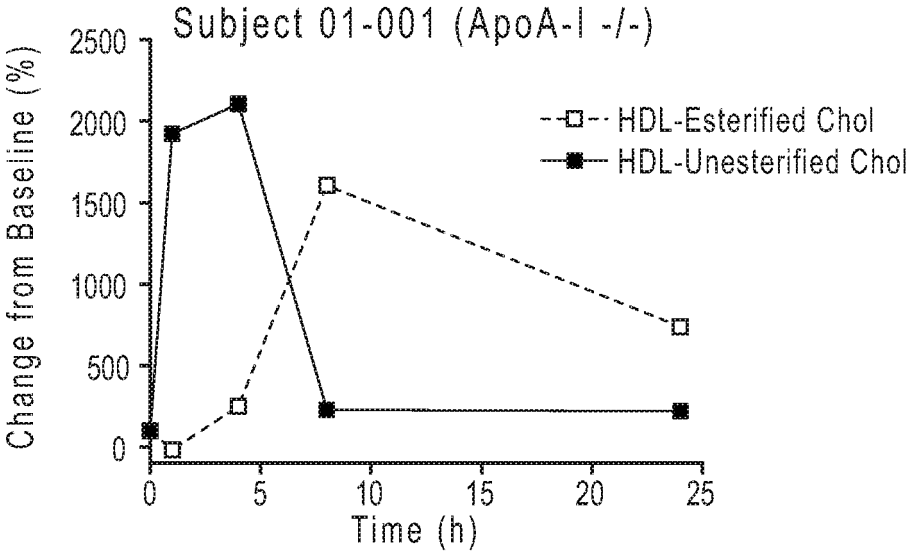


FIG. 69B

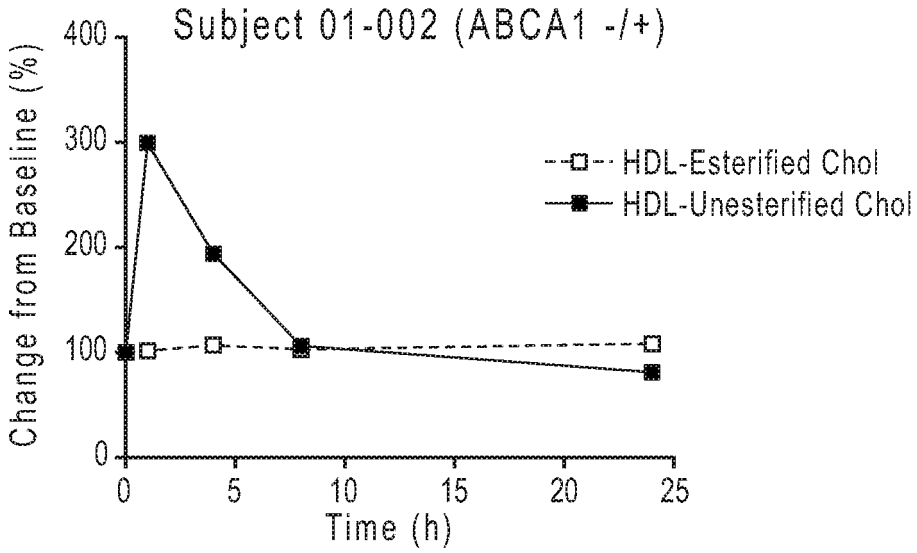


FIG. 69C

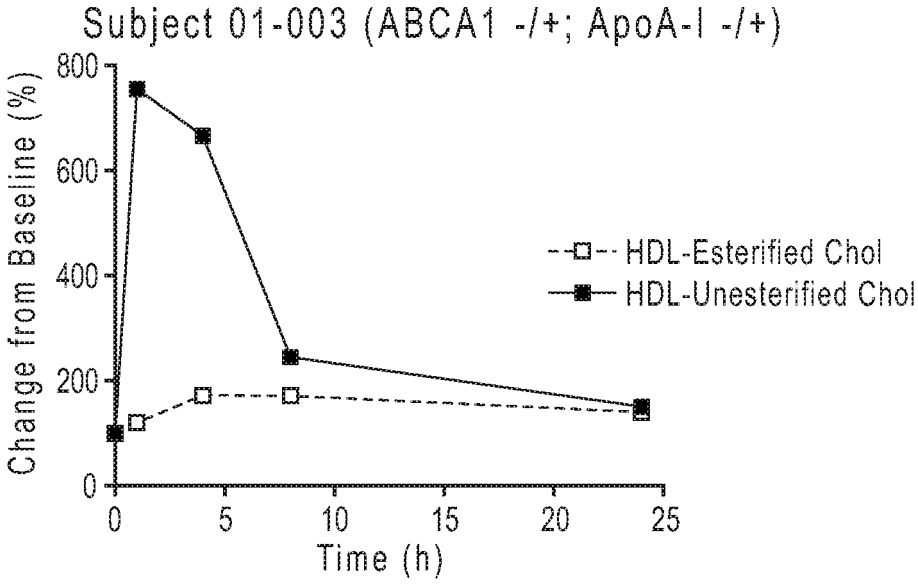


FIG. 69D

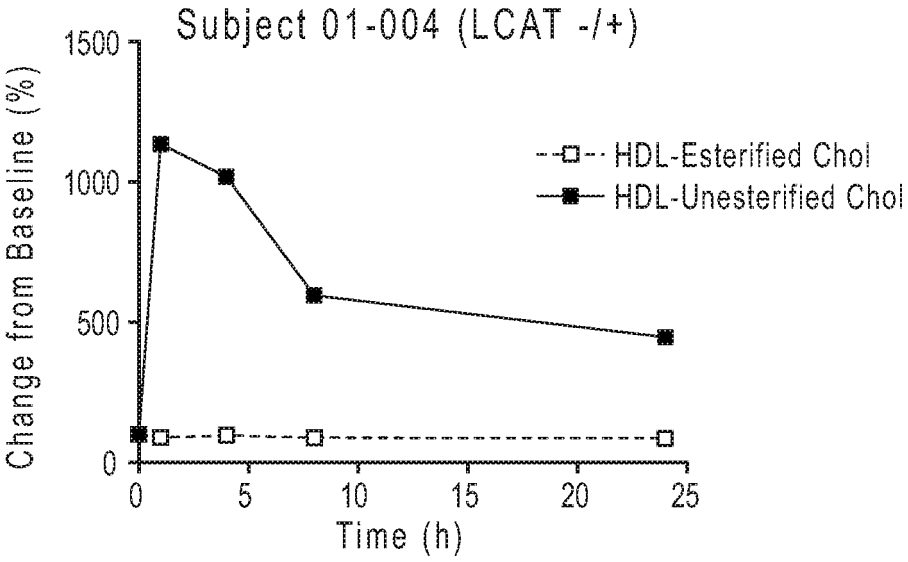


FIG. 69E

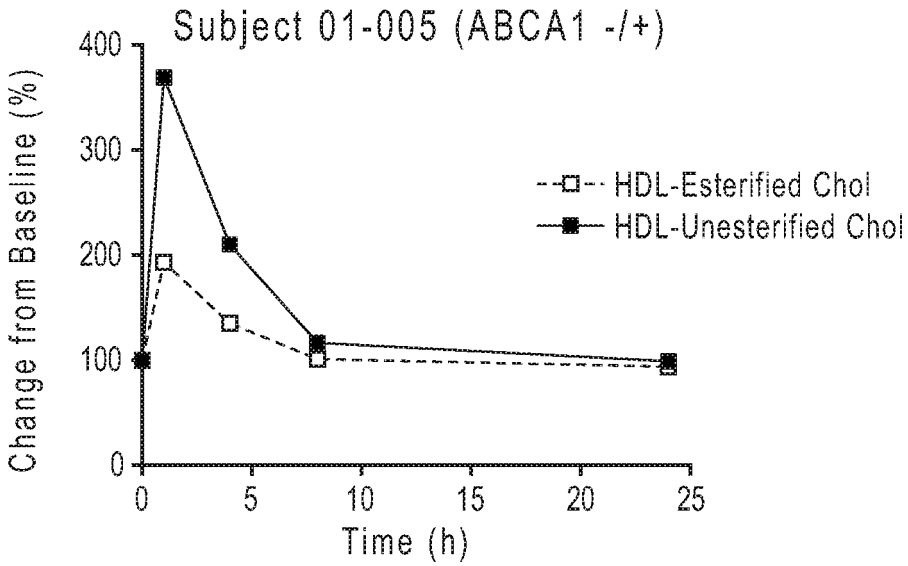
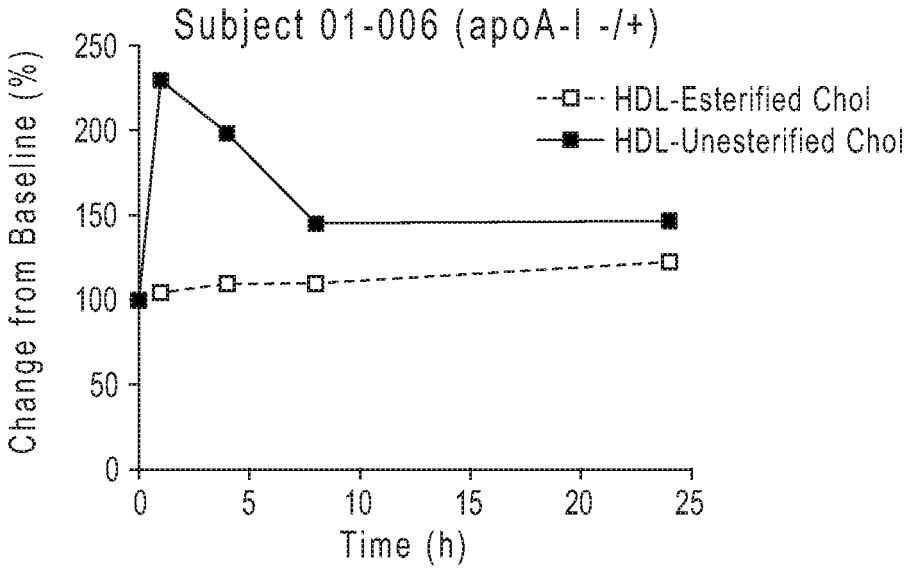


FIG. 69F



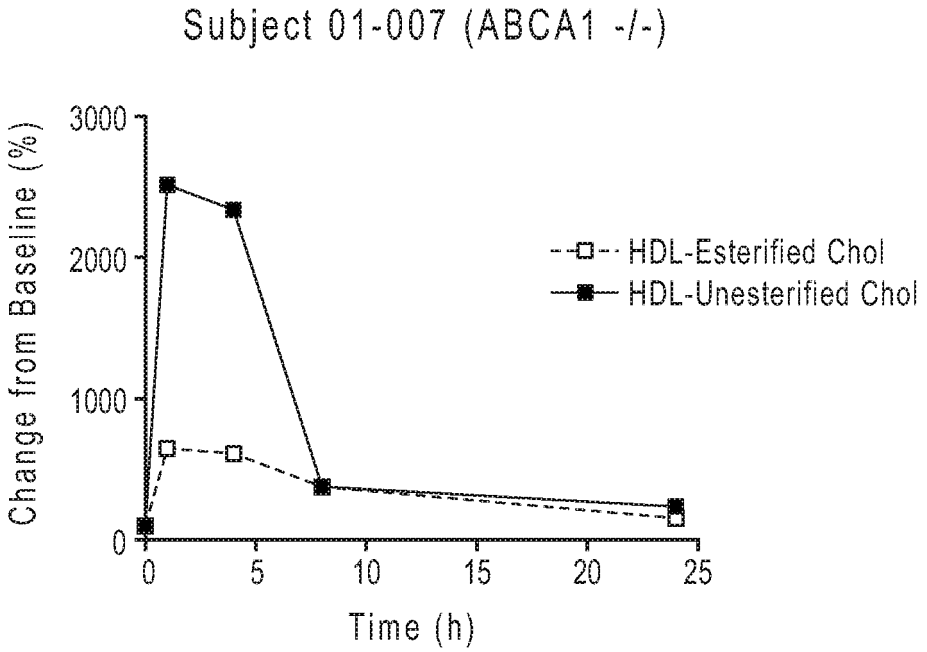

Subject 01-007 (ABCA1 -/-)
Change from Baseline (%)
3000
2000
1000
0
0
5
10
15
20
25
Time (h)
HDL-Esterified Chol
HDL-Unesterified Chol

FIG. 69G

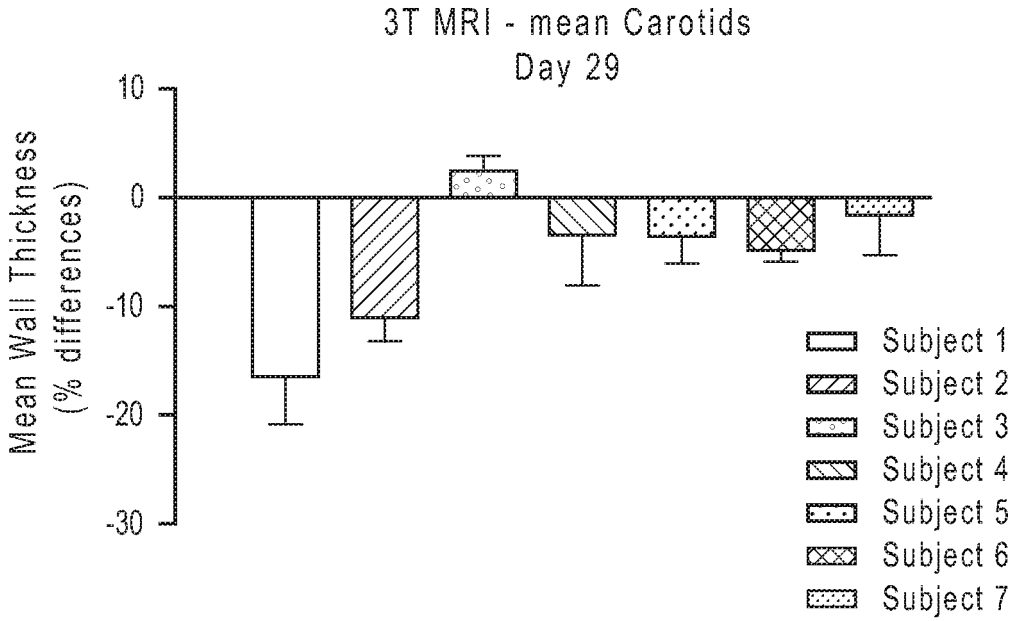

3T MRI - mean Carotids
Day 29
Mean Wall Thickness
(% differences)
10
0
-10
-20
-30
Subject 1
Subject 2
Subject 3
Subject 4
Subject 5
Subject 6
Subject 7

FIG. 70

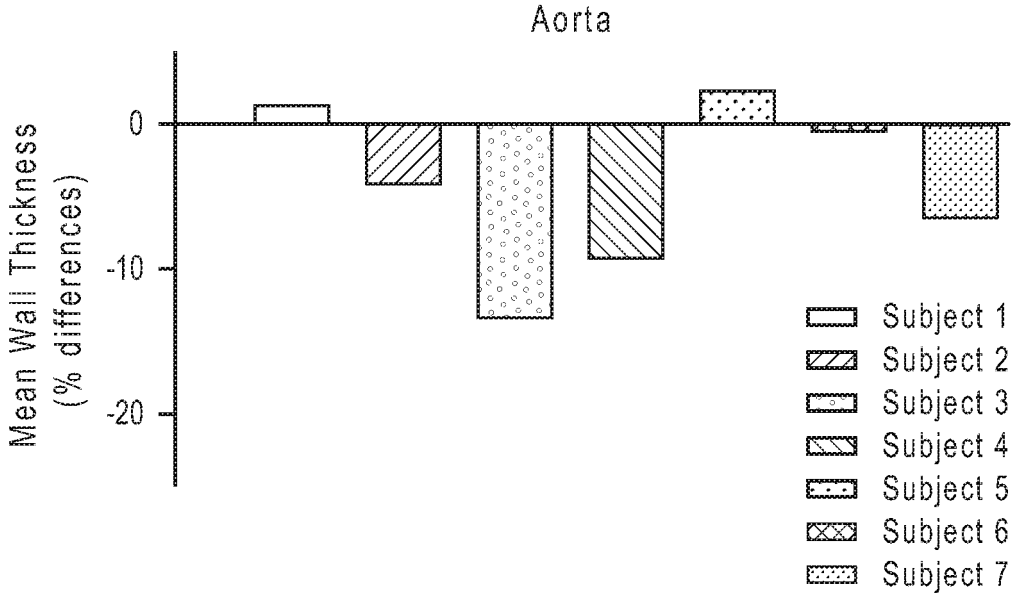

Aorta
Mean Wall Thickness
(% differences)
0
-10
-20
Subject 1
Subject 2
Subject 3
Subject 4
Subject 5
Subject 6
Subject 7

FIG. 71

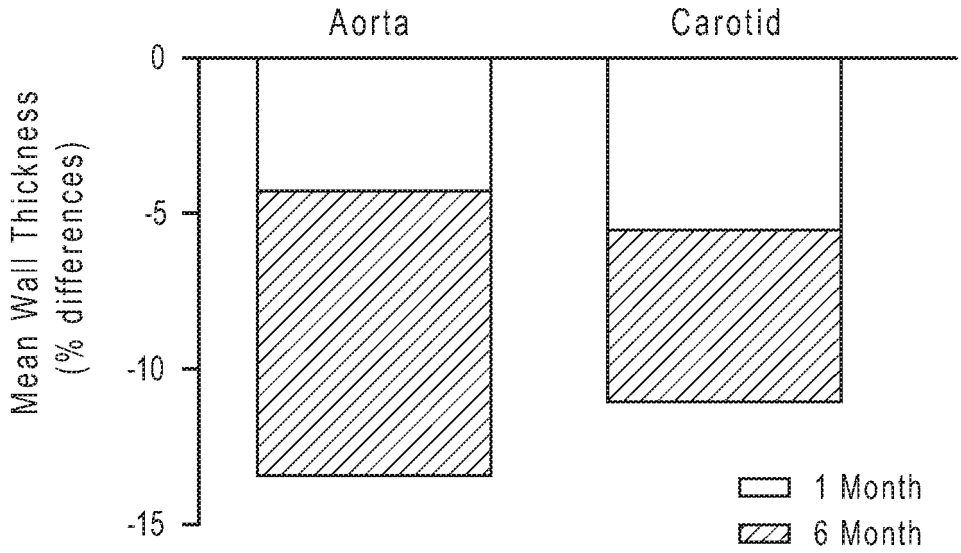

Aorta
Carotid
0
-5
-10
-15
Mean Wall Thickness
(% differences)
1 Month
6 Month

FIG. 72