

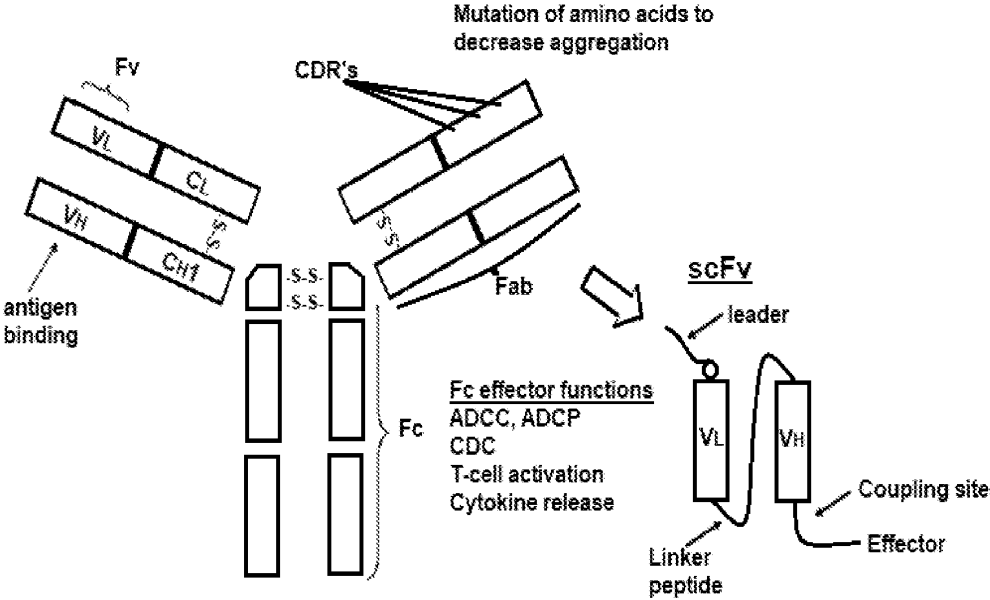


FIG. 1A

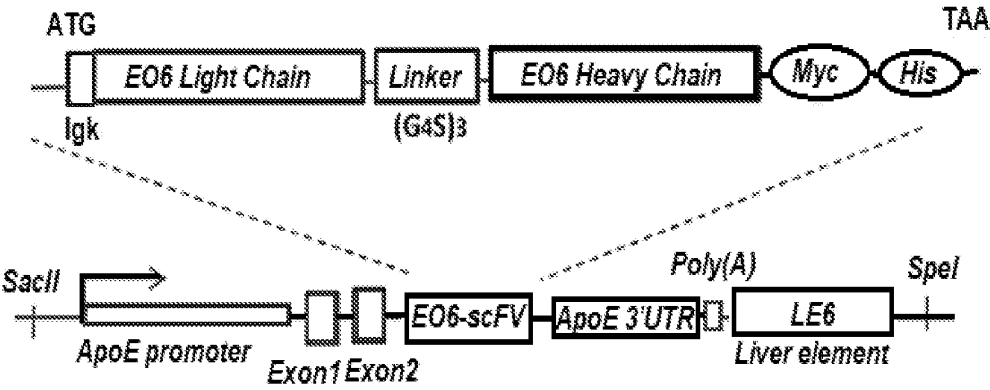


FIG. 1B

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>EO6scFv antibody fragment

(From 1 to 930. Translation 309 a.a. MW=33.65 kDa)

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1 ATGGAGACAGACACACTCTGCTATGGGTACTGCTGCTCTGGGTTCCAGGTTCCACTGGTGACGCGGCCAGCCG
1 M E T D T L L L W V L L L W V P G S T G D A A Q P
76 GCCAGGCGCGCCGTACGAAGCTTAGACATTGTGATGACTCAGTCTCCATCTTCCCTTTCTGTGTGACGAGGTAAG
26 A R R A V R S L D I V M T Q S P S S L S V S A G K
151 AAGGTCACCATTAGTTGCACGGCCAGTGAGAGCCTTTATTCAAGCAAACACAAGGTGCACACTTGGCTTGGTAC
51 K V T I S C T A S E S L Y S S K H K V H Y L A W Y
226 CAGAAGAAACCAGAGCAATCTCCTAACTGCTGATATACGGGGCATCCAACCGATACATTGGGGTCCCTGATCGC
76 Q K K P E Q S P K L L I Y G A S N R Y I G V P D R
301 TTCACAGGCAGTGGATCTGGGACAGATTTCACTCTGACCATCAGCAGTGTACAGGTTGAAGACCTCACACATTAT
101 F T G S G S G T D F T L T I S S V Q V E D L T H Y
376 TACTGTGCACAGTTTTACAGCTATCCGCTCACGTTTCGGTGTGGGACCAAGCTGGAATCAAAGGTGGTGGAGGA
126 Y C A Q F Y S Y P L T F G A G T K L E I K G G G G
451 TCAGGTGGAGGTGGTTTCAGGAGGTGGCGGATCCGAGGTGAAGCTGGTGGAGTCTGGAGGAGGCTTGGTACAGCCT
151 S G G G G S G G G G S E V K L V E S G G G L V Q P
526 GGGGTTCTCTGAGACTCTCCTGTGCAACTTCTGGGTTACCTTCAGTGATTTCTACATGGAGTGGGTCGCCAG
176 G G S L R L S C A T S G F T F S D F Y M E W V R Q
601 GCTCCAGGGAAGAGACTGGAGTGGATTGCTGCAAGTAGAAACAAAGCTAATGATTATACAACAGAGTACGCTGAC
201 A P G K R L E W I A A S R N K A N D Y T T E Y A D
676 TCTGTGAAGGGTCGGTTTCATCGTCTCCAGAGACACTTCCCAAAGCATCCTCTACCTTCAGATGAATGCCCTGAGA
226 S V K G R F I V S R D T S Q S I L Y L Q M N A L R
751 GCCGAGGACACTGCCATTTATTACTGTGCAAGAGATTACTACGGTAGTAGCTACTGGTACTTCGATGTCTGGGGC
251 A E D T A I Y Y C A R D Y Y G S S Y W Y F D V W G
826 GCAGGGACCACGGTCACCGTCTCCTCTCGAGGAGGGCCGAAACAAAACACTCATCTCAGAAGAGGATCTGAATAGC
276 A G T T V T V S S R G G P E Q K L I S E E D L N S
901 GCCGTCGACCATCATCATCATCATCATTGA
301 A V D H H H H H H H *

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Annotation:

A.A. 1 ... 33 = Ig kappa chain leader sequence for antibody secretion.
A.A. 34 ... 146 = EO6 light-chain variable region.
A.A. 42 ... 49 = FW1 region TFLAVTAS mutated to SSLSVSAG to enhance affinity to OxPL-PC/OxLDL and functional activity.
A.A. 57 ... 73 = "TASESLYSSKHKVHYLA" EO6 L-chain CDR1.
A.A. 89 ... 95 = "GASNRYI" EO6 L-chain CDR2.
A.A. 127 ... 136 = "CAQFYSSPLT" EO6 L-chain CDR3.
A.A. 147 ... 161 = (Gly4Ser)x3 flexible linker peptides.
A.A. 162 ... 284 = EO6 heavy-chain variable region with triple mutations of P201A, S224A and A225D to increase antibody affinity to OxPL-PC/OxLDL.
A.A. 187 ... 193 = "GFTFSDF" EO6 H-chain CDR1.
A.A. 213 ... 220 = "RNKANDYT" EO6 H-chain CDR2.
A.A. 259 ... 274 = "CARDYYGSSYWYFDVW" EO6 H-chain CDR3.
A.A. 289 ... 298 = myc epitope tag
A.A. 304 ... 309 = polyHis tag.

FIG. 2

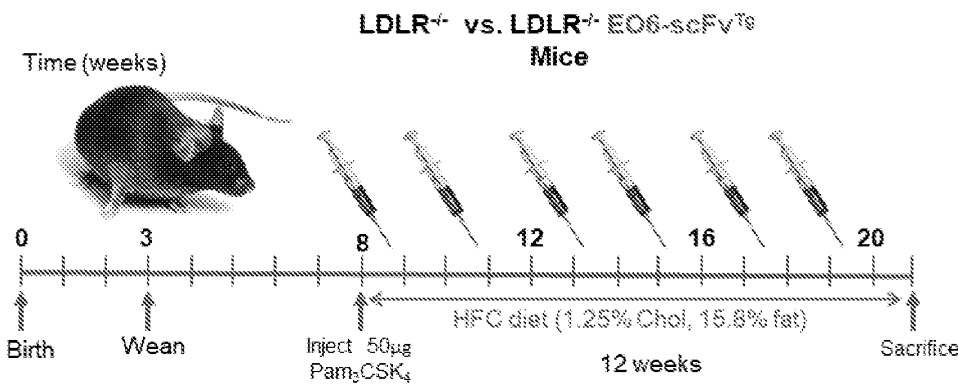


FIG. 3

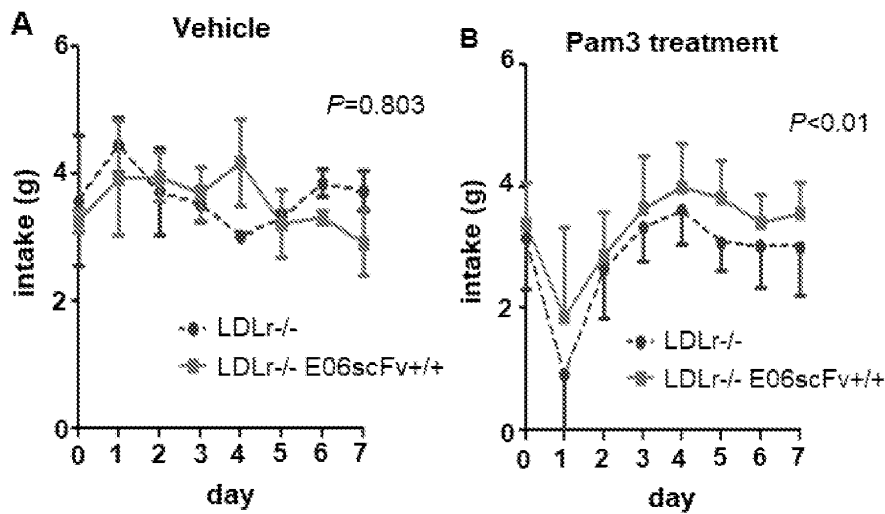


FIG. 4A-B

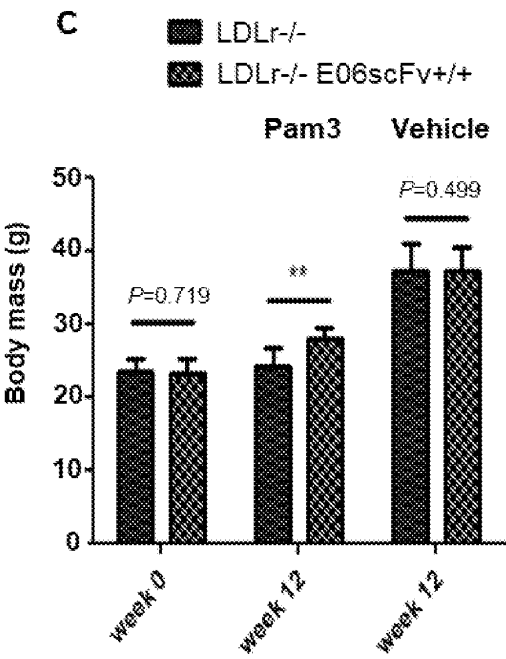


FIG. 4C

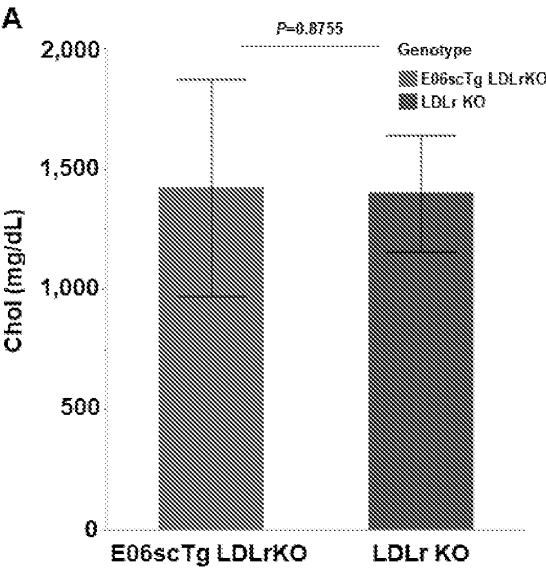


FIG. 5A

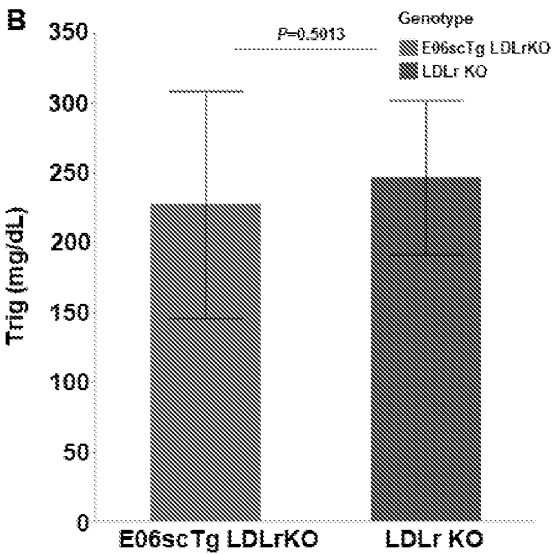


FIG. 5B

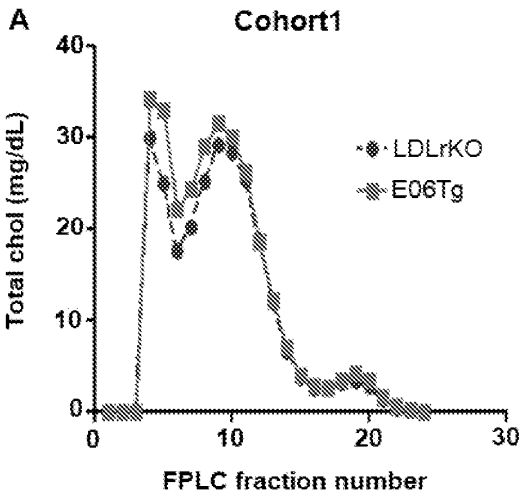


FIG. 6A

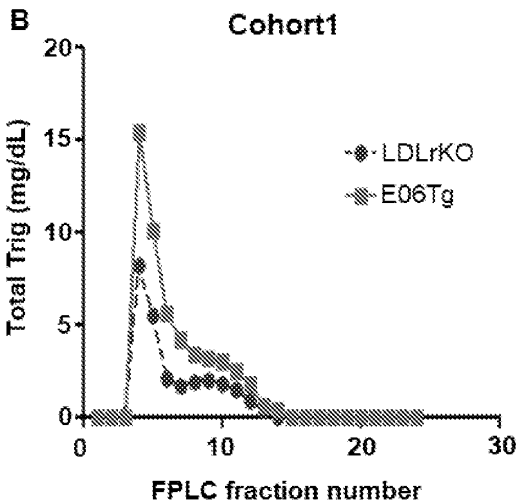


FIG. 6B

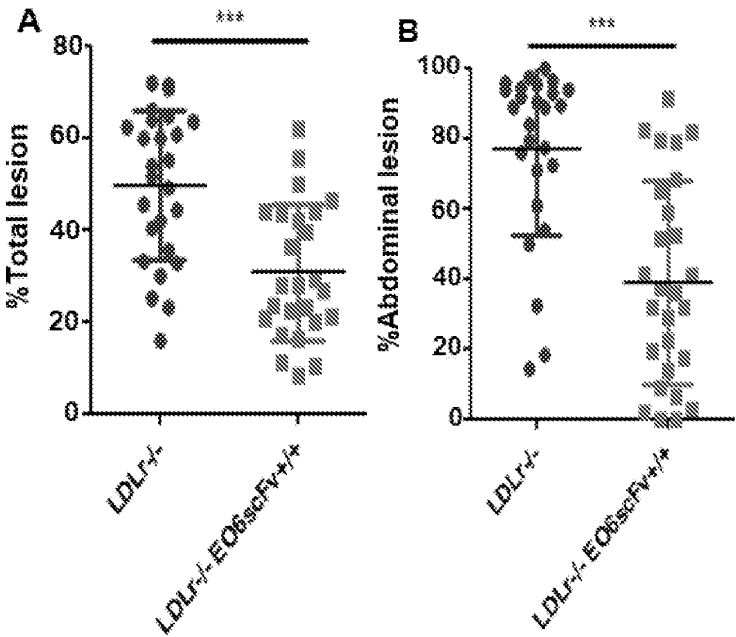


FIG. 7A-B

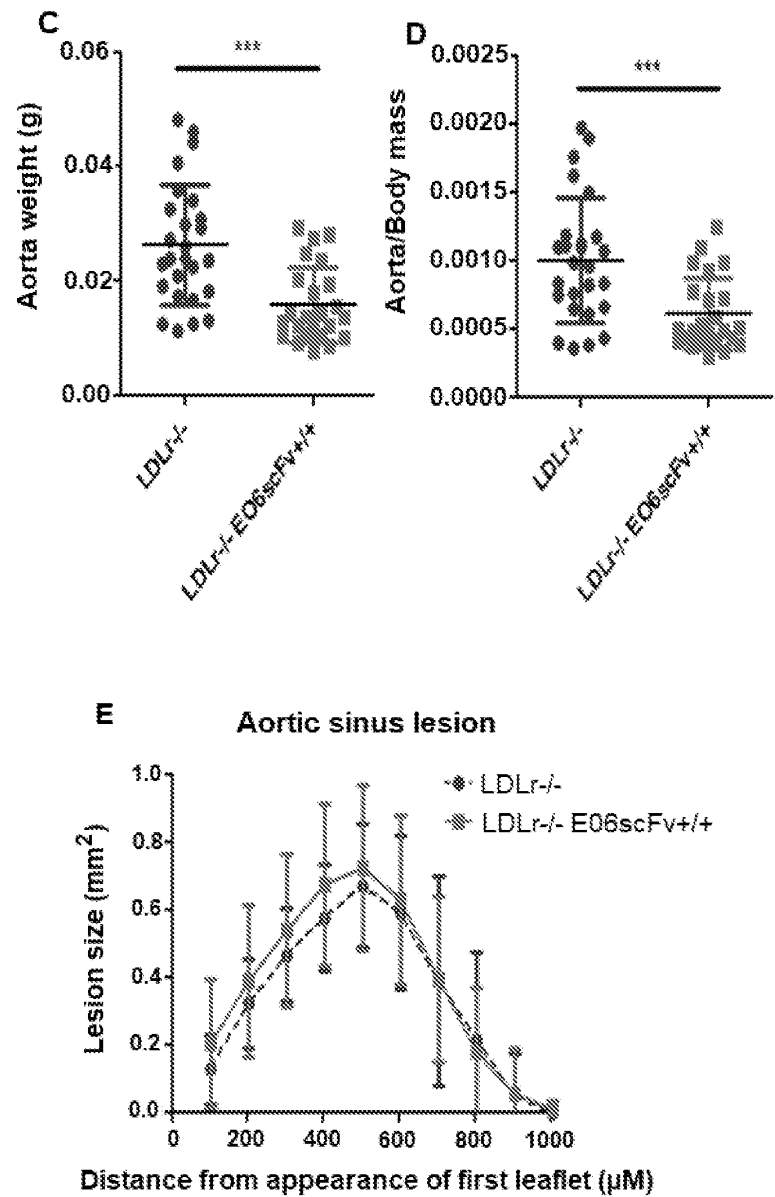


FIG. 7C-E

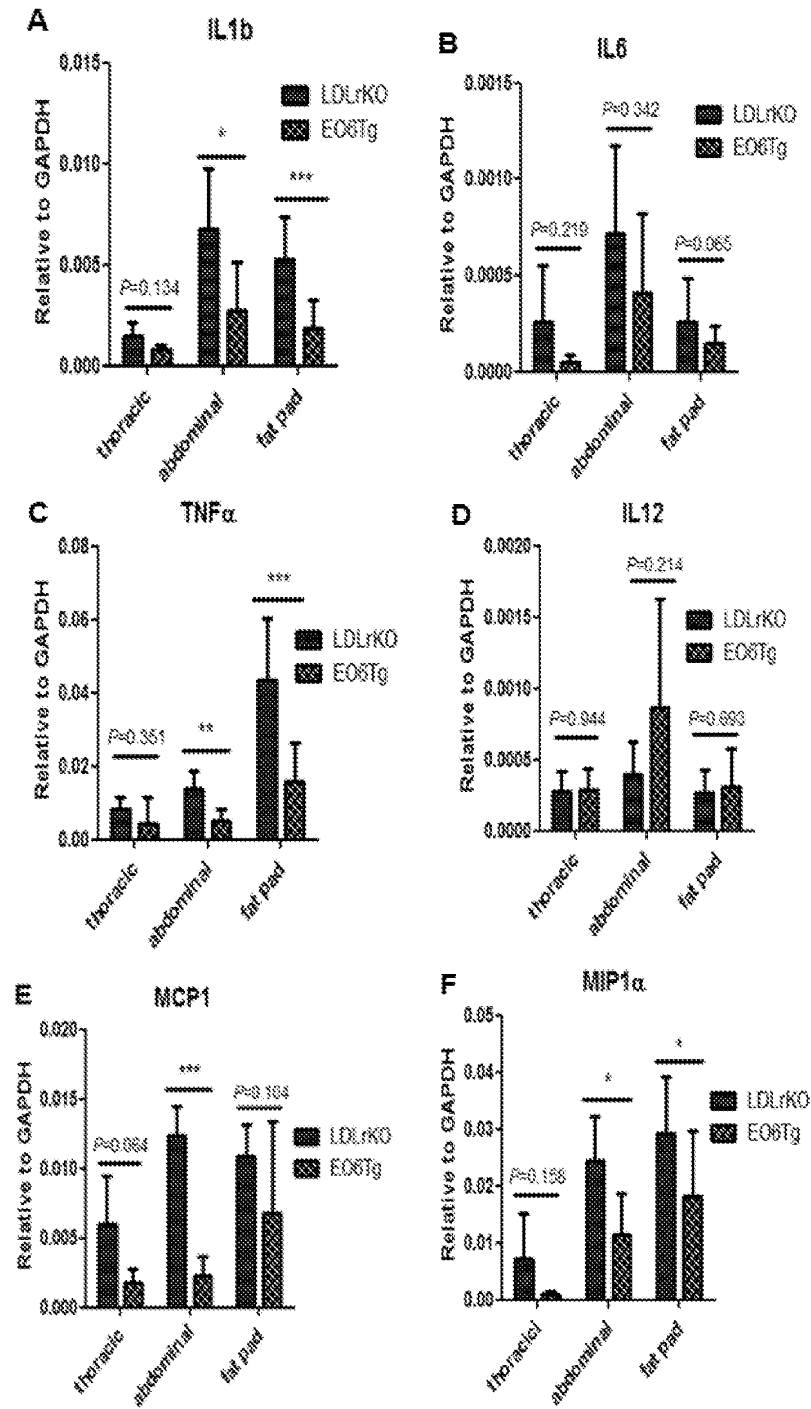


FIG. 8A-F

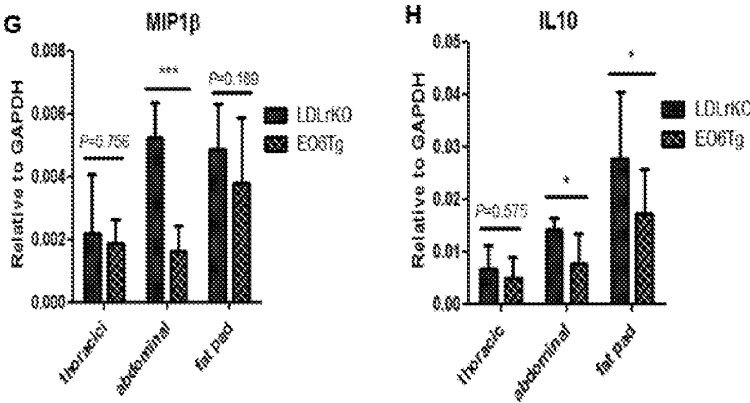


FIG. 8G-H

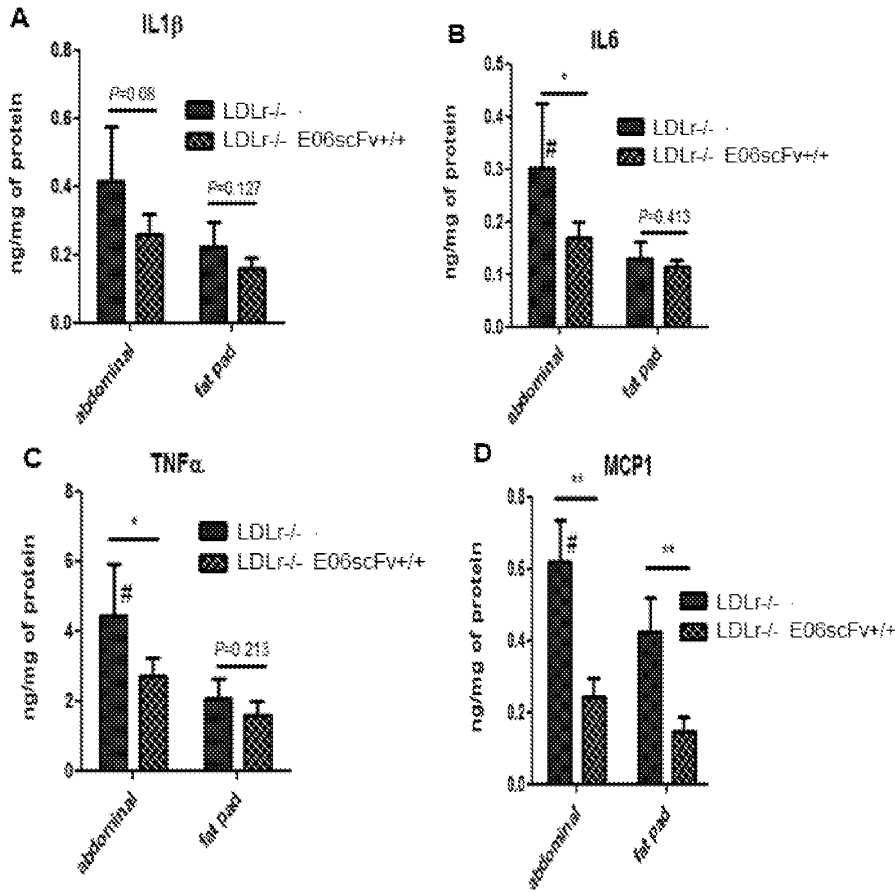


FIG. 9A-D

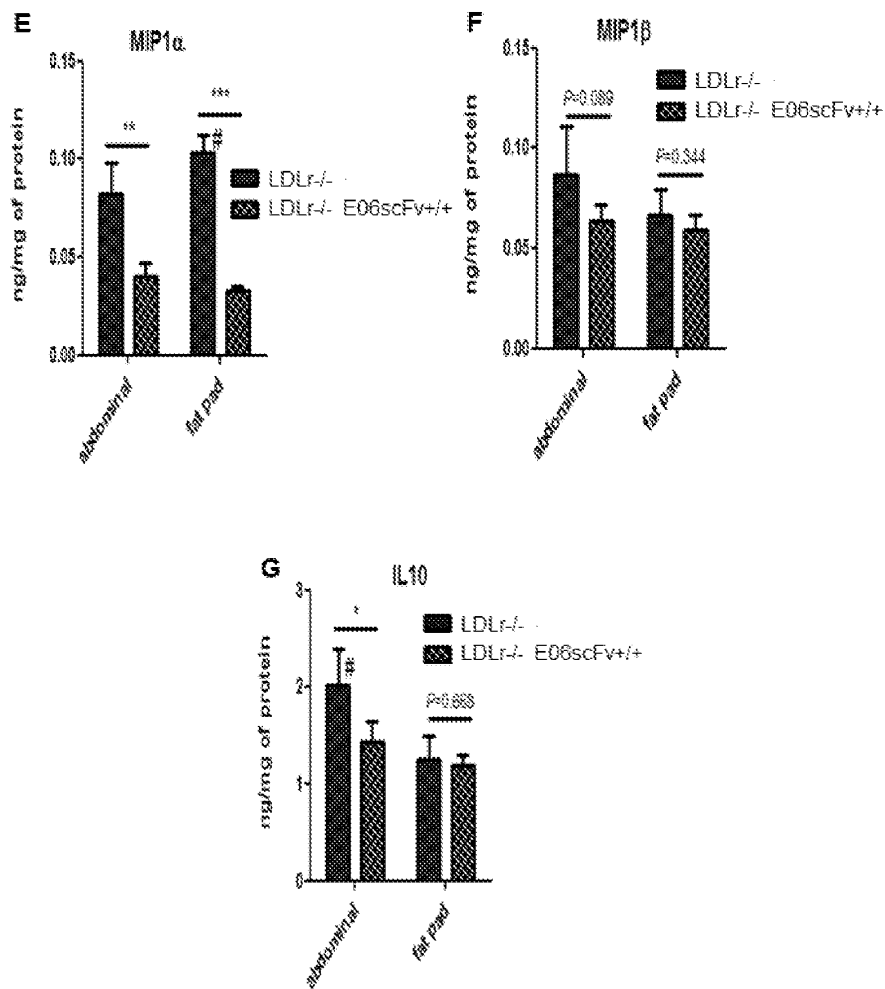


FIG. 9E-G

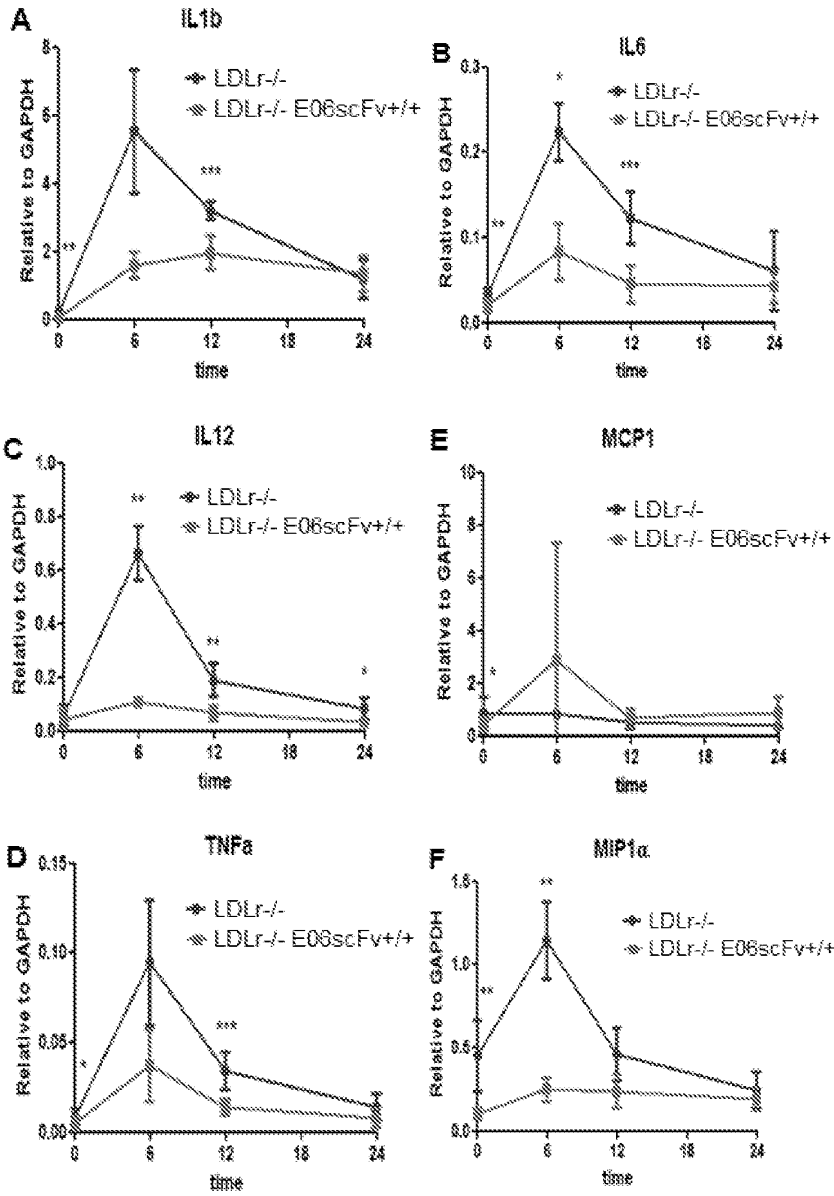


FIG. 10A-F

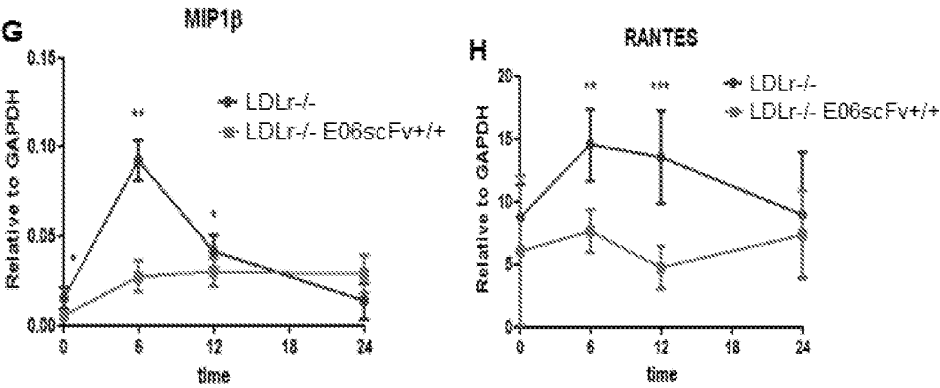


FIG. 10G-H

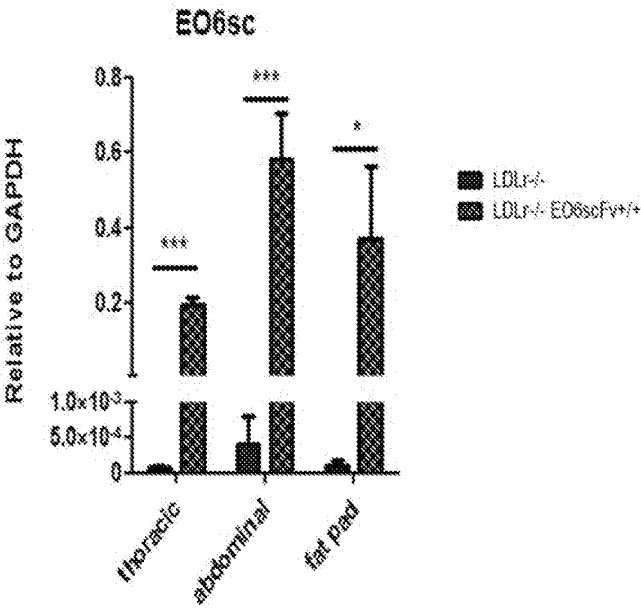


FIG. 11

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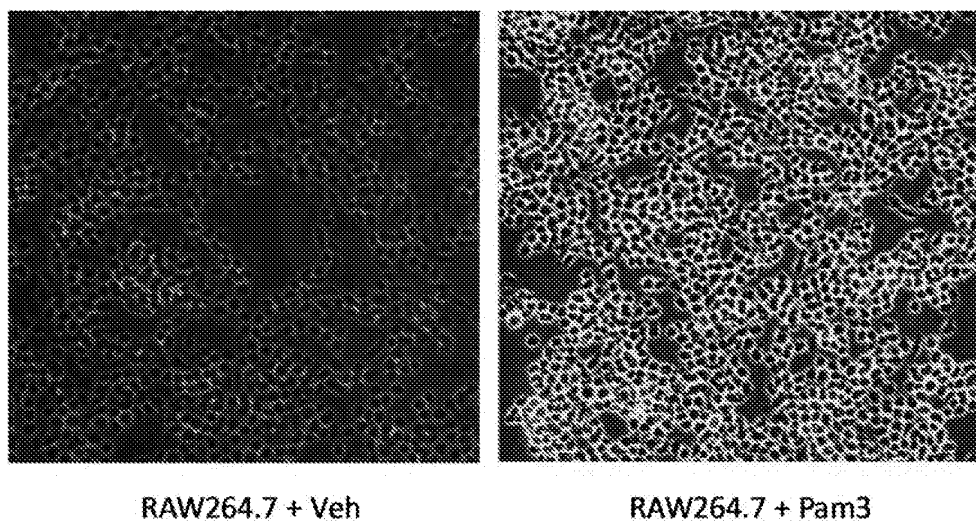


FIG. 12

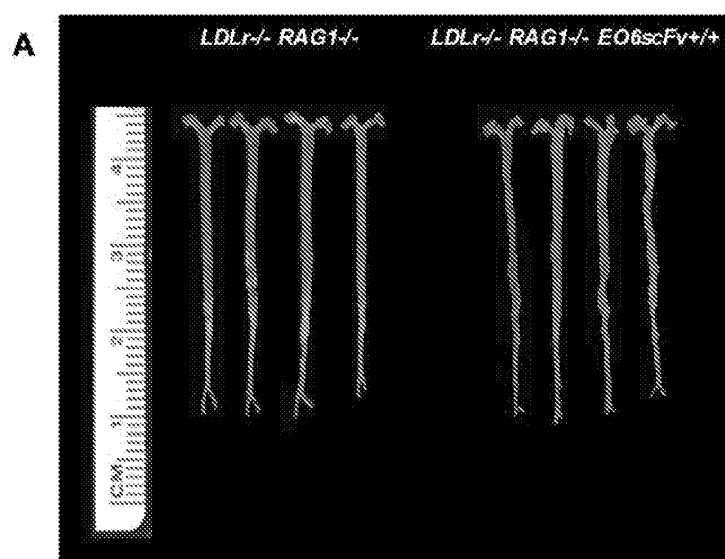


FIG. 13A

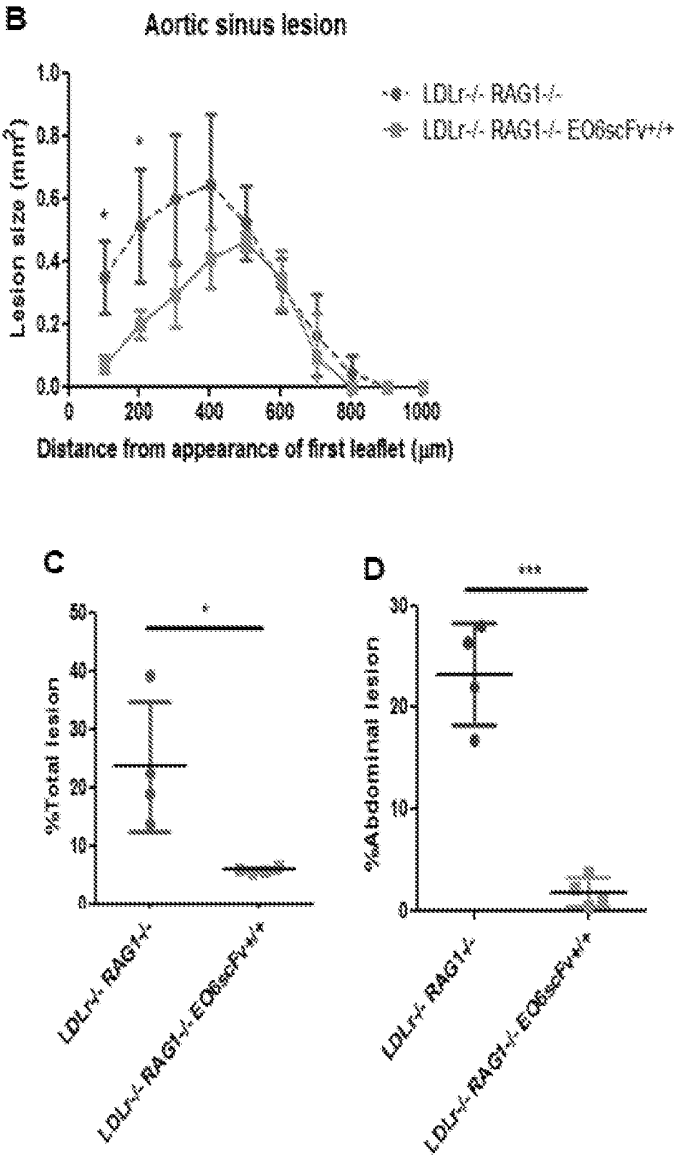


FIG. 13B-D

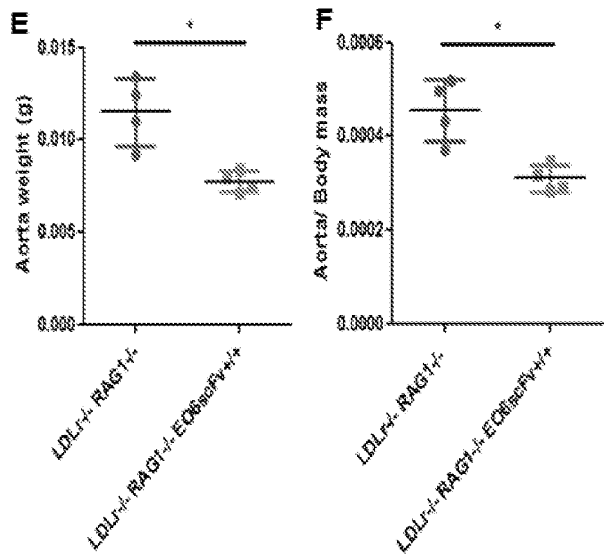


FIG. 13E-F

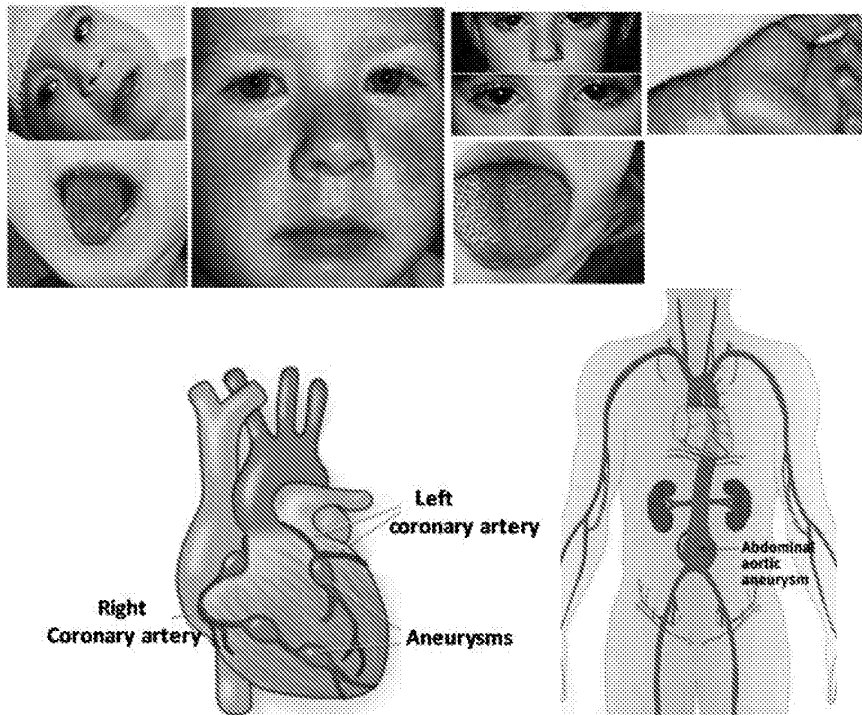


FIG. 14

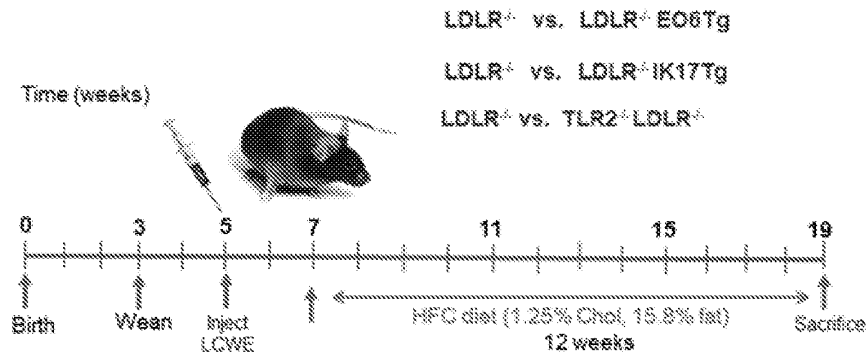


FIG. 15

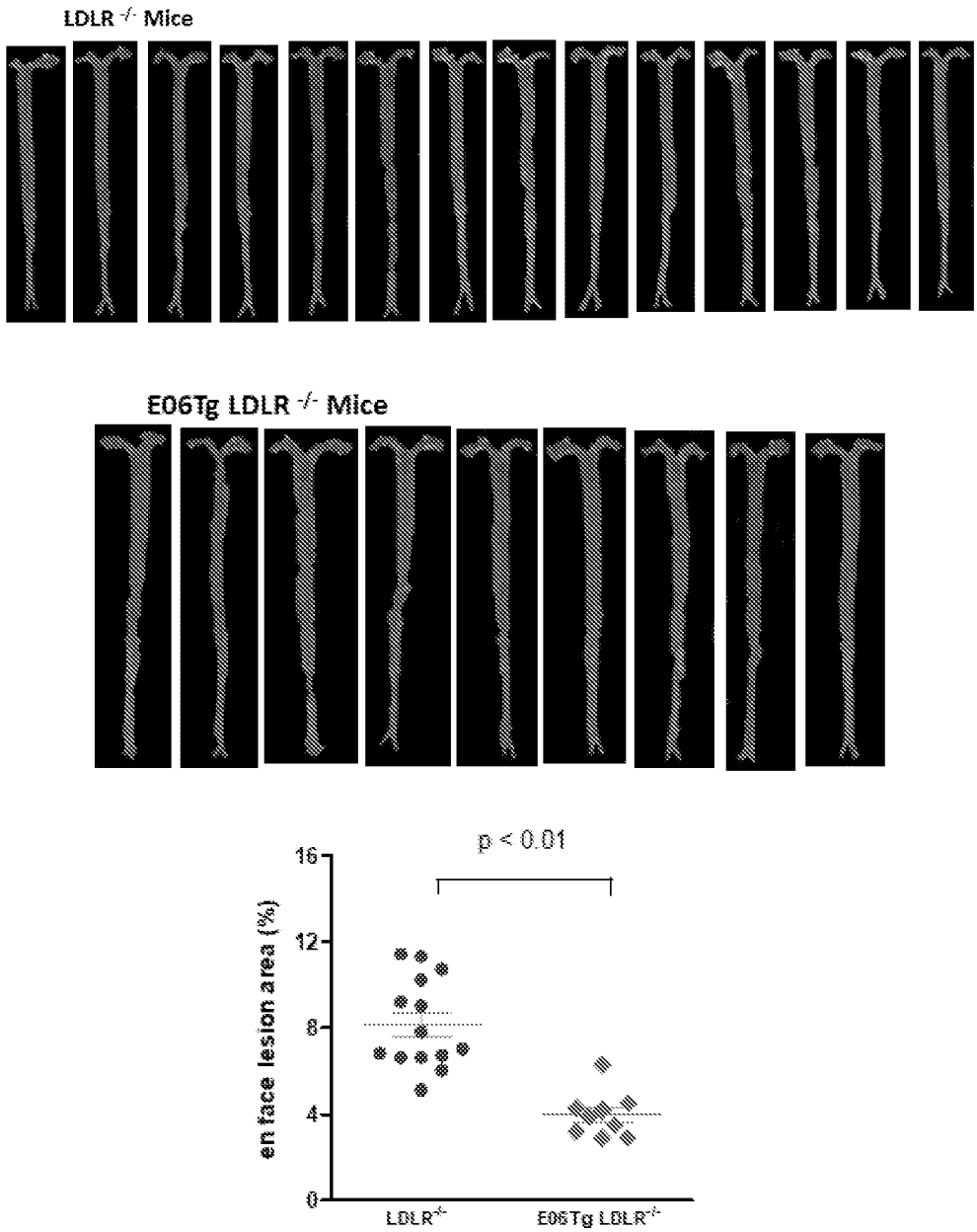


FIG. 16

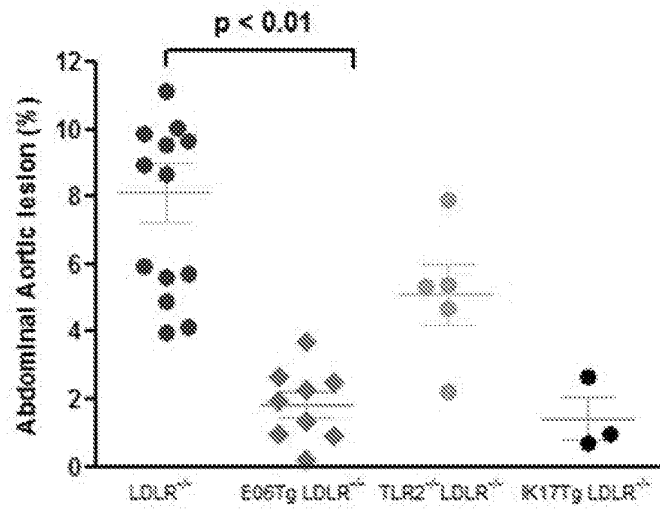
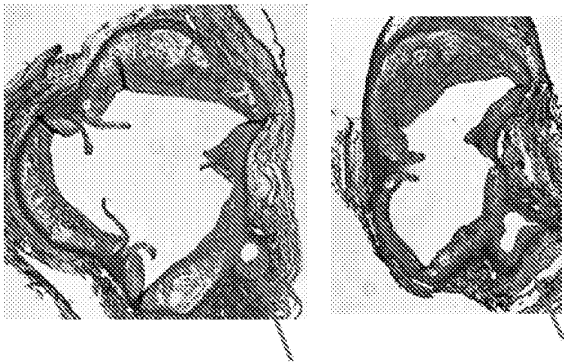


FIG. 17

LDLR ^{-/-} Mice



E06-Tg LDLR ^{-/-} Mice

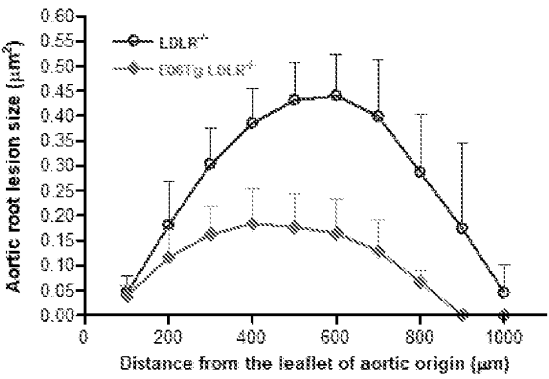
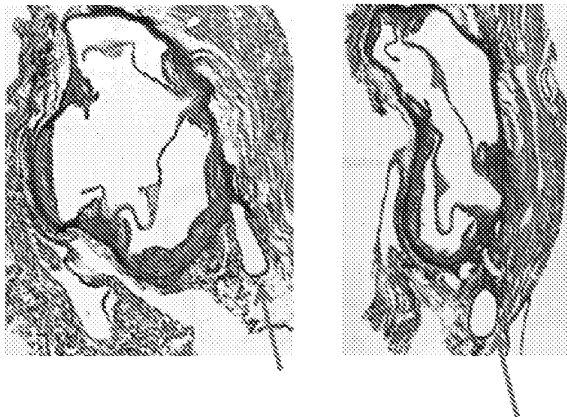
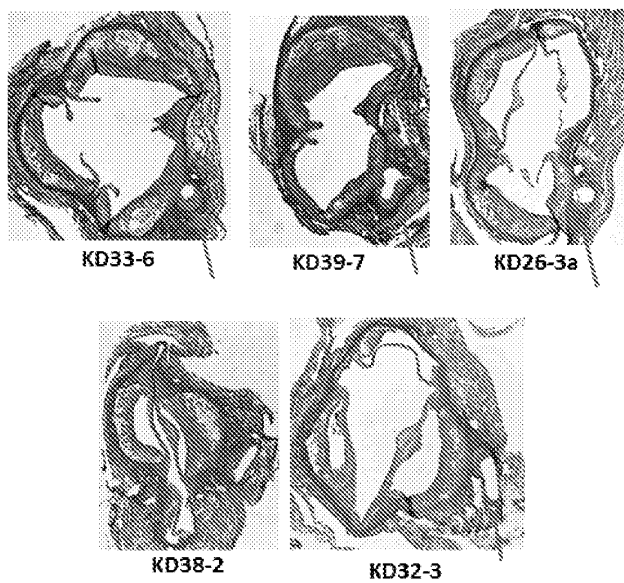


FIG. 18

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LDLR^{-/-} Mice



E06-Tg LDLR^{-/-} Mice

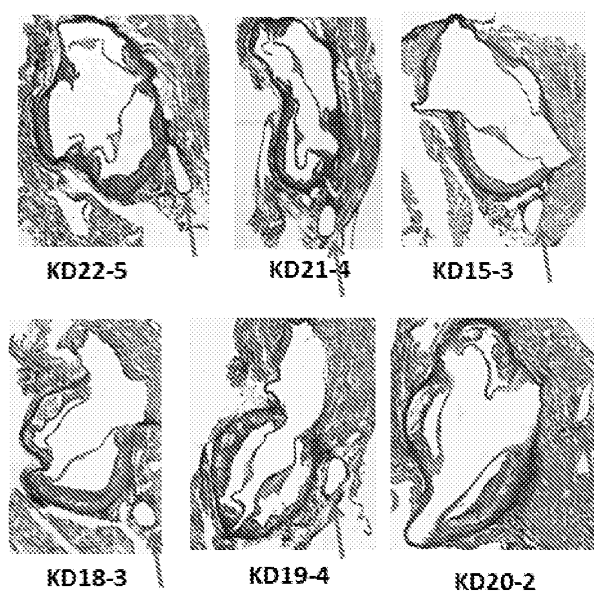
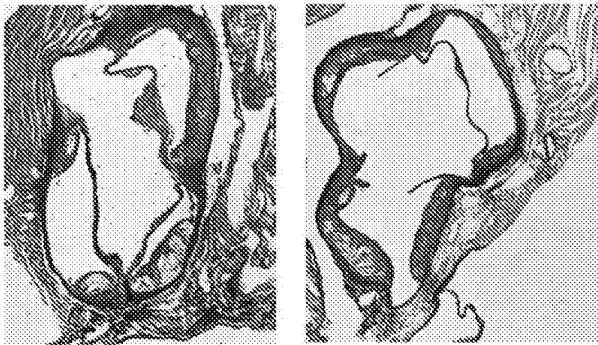


FIG. 19

TLR2^{-/-}LDLR^{-/-}



IK17-Tg/LDLR^{-/-}

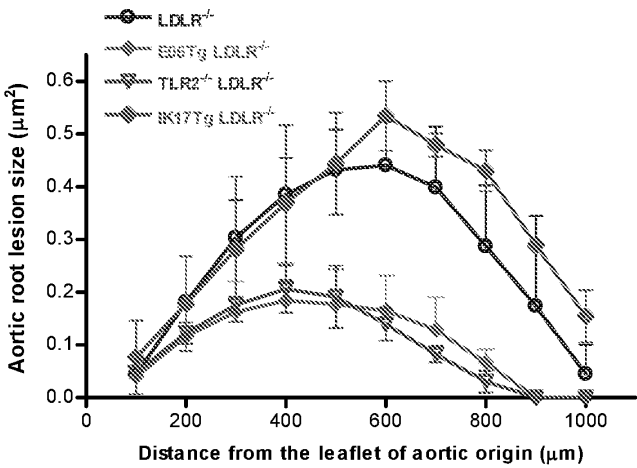
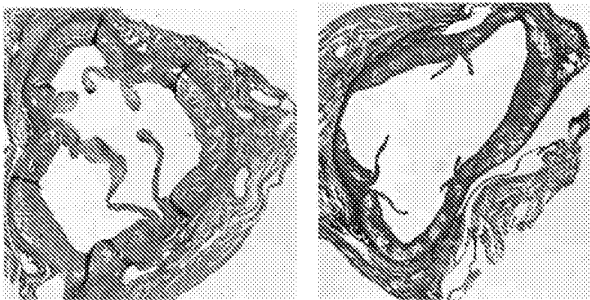


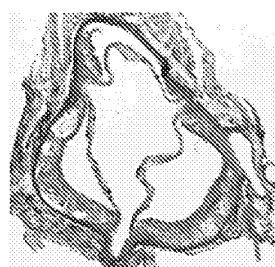
FIG. 20

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TLR2^{-/-} LDLR^{-/-}



KD11-4



KD10-4

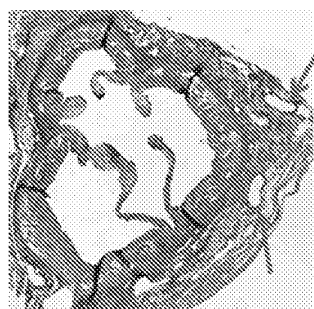


KD12-5

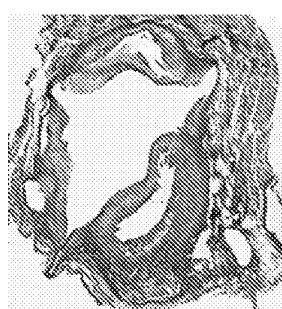


KD13-4

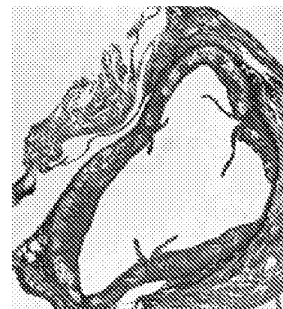
IK17-Tg LDLR^{-/-}



KD31-5



KD29-2



KD30-6

FIG. 21

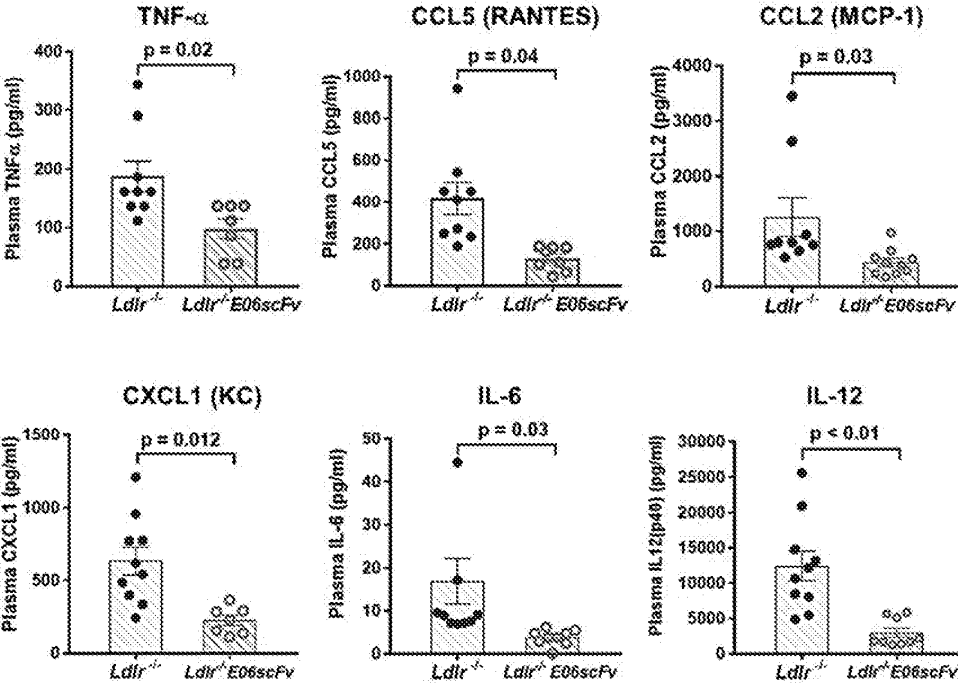


FIG. 22