Supplementary Information

Supplemental Methods

Immunoblotting

Native immunoblotting for apoE in CSF was conducted by running 10 uL of CSF through 6% native PAGE, transferring to a PVDF membrane (Millipore) and probing using an anti-apoE antibody (1:500; Chemicon, AB947) and with an anti-albumin antibody (1:5000; Bethyl Laboratories, A90-134A) as a loading control. For detection of ABCA1, LDLR, LRP, and SR-BI, equal amounts of tissue lysate (50-75 µg) were electrophoresed through 10% SDS-polyacrylamide gels, transferred to PVDF membranes (Millipore), probed using monoclonal anti-ABCA1 (1:1000; a gift from Dr. M. R. Hayden, clone AC10), murine specific LDLR (1:1000; R&D Systems, AF2255), anti-LRP (1:2000; a gift from Dr. J. Herz), an anti-SR-B1 antibody (1:1000; Novus, NB-400131), and with an anti-GAPDH antibody (1:5000; Millipore, MAB347) as a loading control. Blots were developed and quantified as described in the main text.

Supplemental Figure Legends

SFigure 1: Size and distribution of apoE-containing lipoprotein particles in the CSF of 15-16m old male and female APP/PS1 WT (+/+) and LCAT-/- (-/-) mice. CSF lipoprotein particles were separated by size, specifically diameter, under non-denaturing conditions via native-PAGE and probed with an apoE antibody (top panel) and albumin antibody (bottom panel), used to demonstrate equal loading. ApoE-particles <7.1nm are classified as 'lipid-poor'.

SFigure 2: Protein levels of ABCA1, LDLR, LRP, and SR-BI in the cortex and hippocampus of 15-16m old male APP/PS1 WT and LCAT-/- mice. Equal amounts of carbonate soluble cortical and hippocampal lysates were subjected to denaturing-PAGE and immunoblotting and quantified using densitometry. Graphs represent mean ± SEM for A) ABCA1 B) LDLR C) LRP and D) SR-BI with an N of 5-6 per group with the exception of hippocampal SR-BI APP/PS1 LCAT -/- where an N of 3 was used. Statistics were determined using a Mann-Whitney test.