Supplementary Figure I. Chemical structure of POLARIC-maleimide.

Supplementary Figure II. Effect of POLARIC-labeling on the secondary structure of apoA-I. Far-UV CD spectra of apoA-I-POLARIC in the lipid-free state (*dotted line*) or dHDL particles (*solid line*).

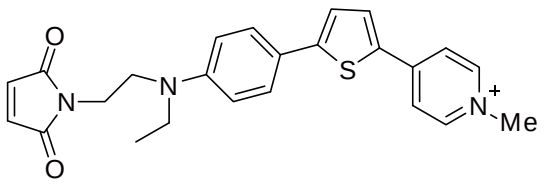
Supplementary Figure III. The size of dHDL particles containing apoA-I-POLARIC. Gel filtration profile of dHDL particles containing apoA-I-POLARIC and POPC. The dHDL particles were fractionated by gel filtration chromatography on a Superdex 200 column (16/60 PG), and 1.25 ml fractions were collected. The fractional distribution of apoA-I is plotted.

Supplementary Figure IV. The concentration dependence of fluorescence intensity of apoA-I-POALRIC. The fluorescence intensity of apoA-I-POLARIC in the lipid-free state was measured.

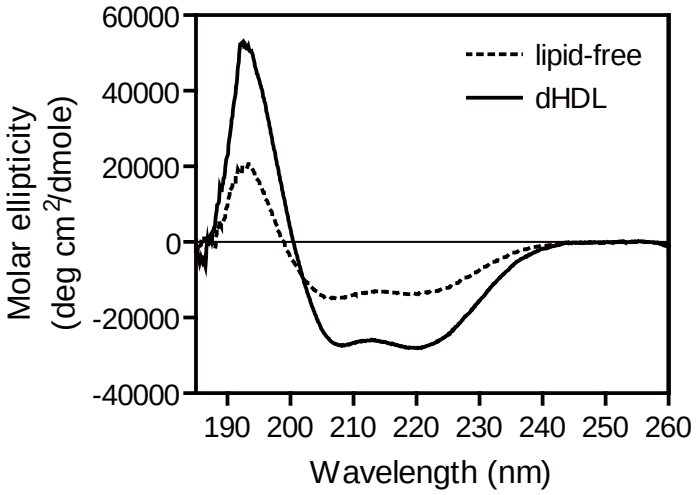
Supplementary Figure V. Detection of apoA-I in conditioned medium. BHK/ABCA1 cells were treated with or without 10 nM mifepristone for 20 h and incubated with 2.5 μg/ml apoA-I-POLARIC for 6h. The amount of apoA-I-POLARIC in the medium before (control) and after incubation with BHK/ABCA1 cells was analyzed by western-blotting using anti-apoA-I antibody.

Supplementary Figure VI. Detection of apoA-I in microparticle fraction. ApoA-I protein in indicated fractions of Figure 3B was detected with anti-apoA-I antibody.

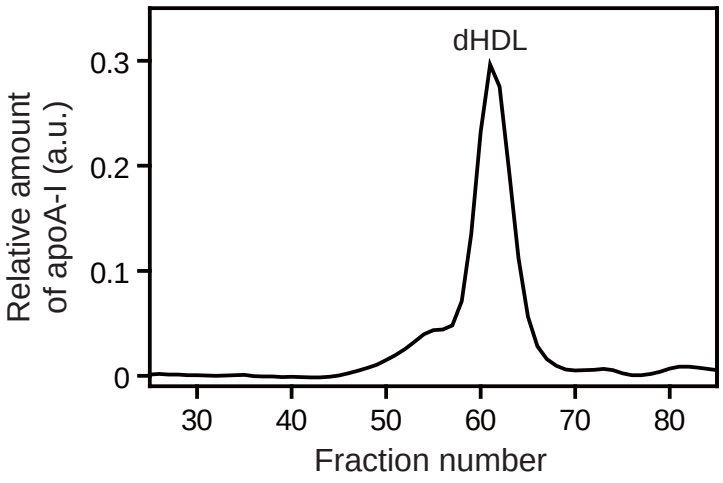
Supplementary Figure VII. The effect of size and lipid composition of dHDL particles on the fluorescence intensity of apoA-I-POLARIC. (A) DMPC multilamellar vesicles (MLVs) (1.2 mg/ml) containing 5 mol% cholesterol were incubated with apoA-I-POLARIC (0.6 mg/ml) at 24.5°C for 24 h. The resultant HDL particles were fractionated by gel filtration chromatography on a Superdex 200 column (10/300 GL), and 0.3 ml fractions were collected. The fluorescence intensity and amount of apoA-I-POLARIC in each fraction were analyzed by fluorescence of POLARIC and absorbance at 280 nm, respectively. ▽, 11.0 nm; ▼, 13.6 nm. (B) Gel filtration profile of dHDL particles containing apoA-I-POLARIC and DPPC. The dHDL particles were fractionated by gel filtration chromatography on a Superdex 200 column (10/300 GL), and 0.3 ml fractions were collected. The fluorescence intensity and amount of apoA-I-POLARIC in each fraction were analyzed by fluorescence of POLARIC and absorbance at 280 nm, respectively.



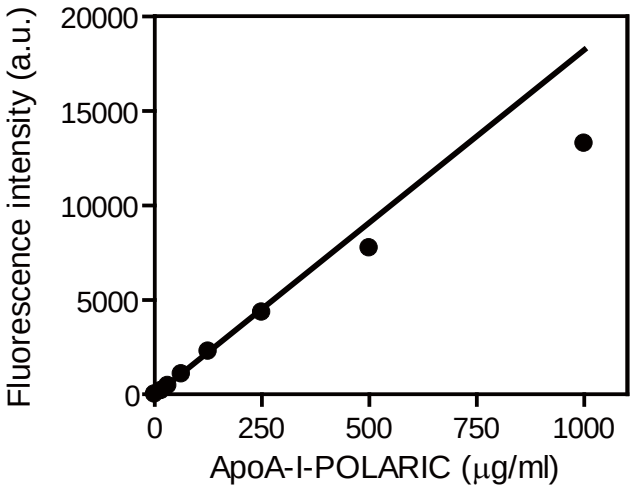
Supplementary Figure I. Omura, R et al.



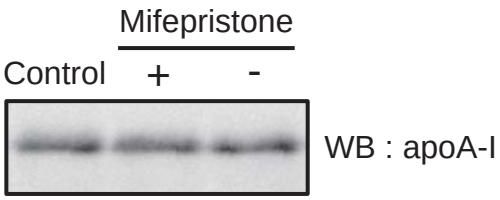
Supplementary Figure II. Omura, R et al.



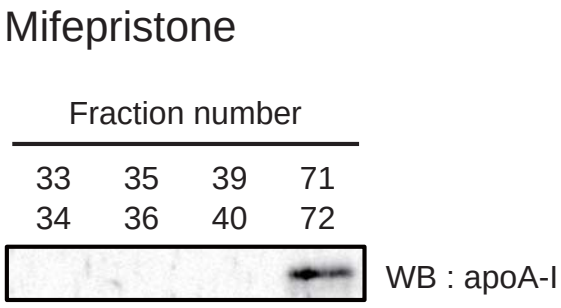
Supplementary Figure III. Omura, R et al.



Supplementary Figure IV. Omura, R et al.

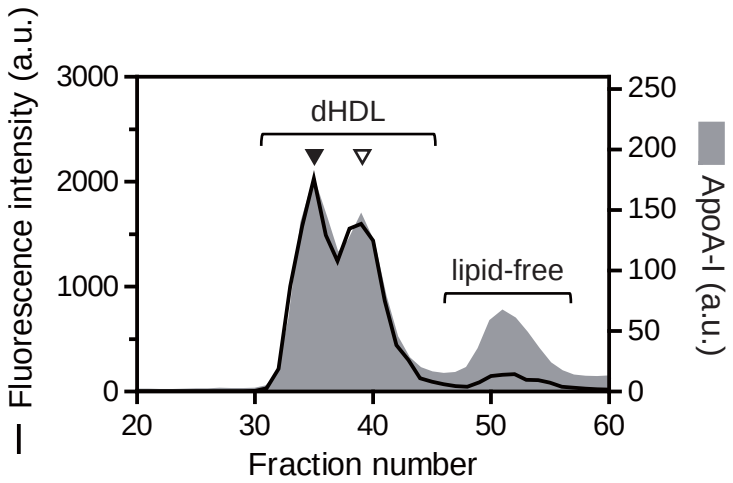


Supplementary Figure V. Omura, R et al.



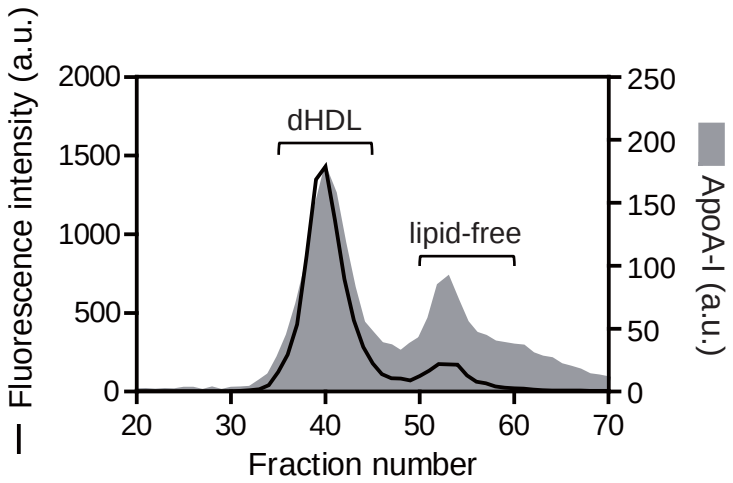
Supplementary Figure VI. Omura, R et al.

A



Supplementary Figure VII. Omura, R et al.

B



Supplementary Figure VII. Omura, R et al.