Supplementary Information

Apolipoprotein A-I structural organization in high density lipoproteins isolated from human plasma

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Supplementary Figures

1: Particle size characterization.

2: Correlation of particle diameters calculated from composition vs. experimental measurement.

3: Cross-linking of various LpA-I particles as a function of increasing concentrations of BS^3 cross-linker.

4: Correlation of particle diameters calculated from composition vs. experimental measurement.

5. Characterization of gel filtration isolated LpA-I_{2b} and LpA-I_{3b} and comparison of their cross-linking patterns.

6: Association constant of monoclonal antibody AI-115.1 to immobilized HDL subfractions by surface plasmon resonance.

7: Evaluation of the Double Super Helix (DSH) model in native LpA-I particles.

Supplementary Tables

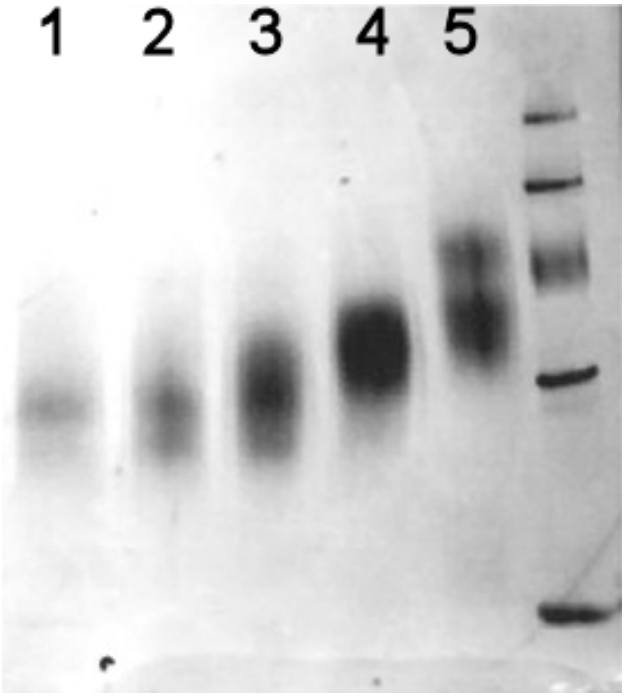
1: Calculated number of molecules per particle for each of the major components of HDL.

2: Particle twist calculation parameters.

Supplementary Methods

Supplementary References

a



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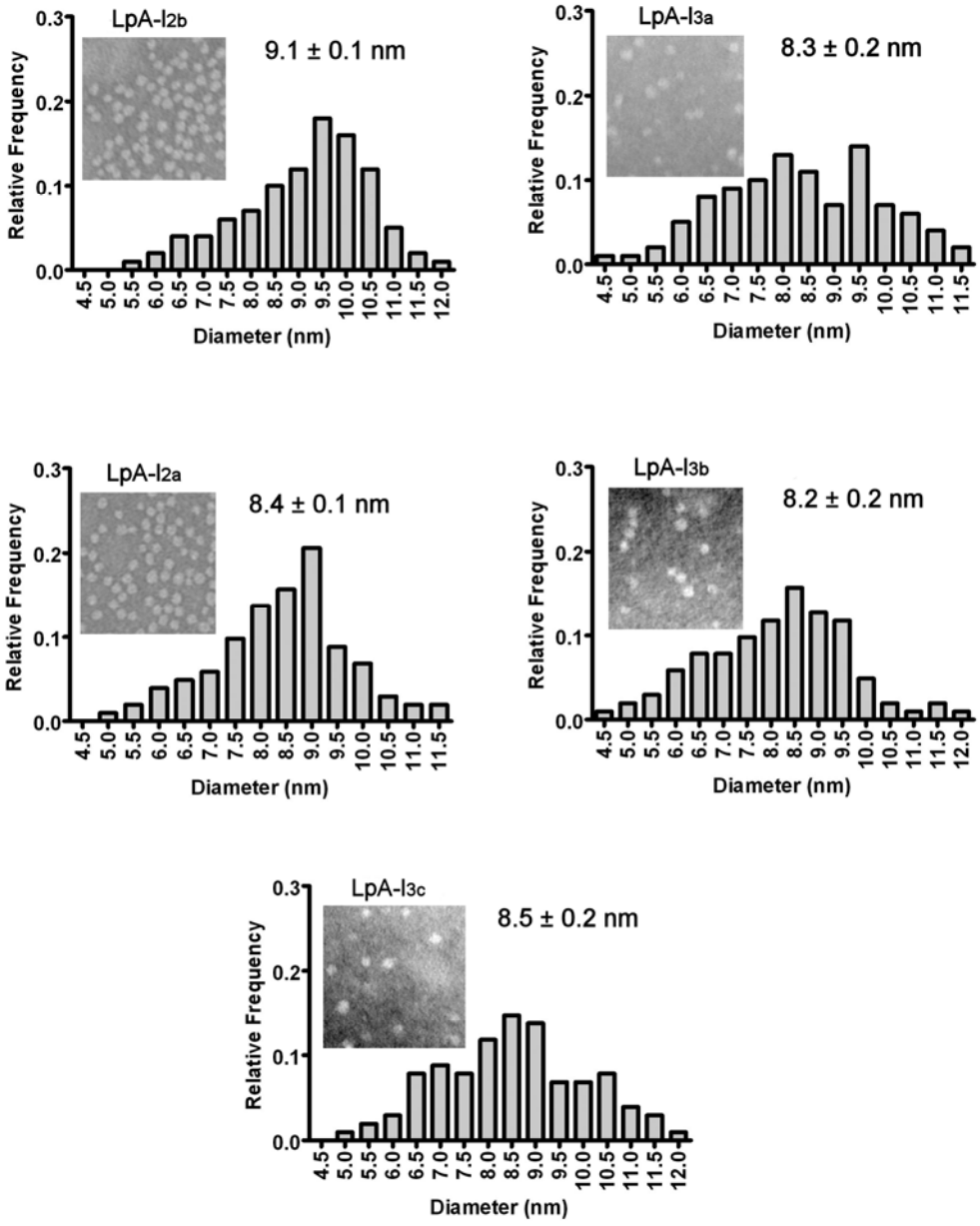
b



Supplementary Figure 1: Particle size characterization. (**a**) Representative native gel electrophoresis of five HDL subfractions (not LpA-I) obtained from a healthy normolipidemic control subject. Lane 1, HDL_{3c}; lane 2, HDL_{3b}; lane 3, HDL_{3a}; lane 4, HDL_{2a}; lane 5, HDL_{2b} and standards (thyroglobulin, ferritin, catalase, LDH and albumin corresponding to 669, 440, 232, 140 and 66 kDa in the descending order). The calculated mean hydrated diameters of HDL subfractions are: 8.7 ± 0.3, 8.7 ± 0.2, 9.0 ± 0.3, 9.8 ± 0.5 and 11.3 ± 0.4 nm for HDL3c, 3b, 3a, 2a and 2b, respectively (mean ± standard deviation (S.D.) for 7 normolipidemic controls). (**b**) Negative stain electron microscopy of LpA-I samples from one healthy normolipidmic donor**.** Inset shows a negative stain image of the particles. Histograms were generated as described in **Supplementary Methods**. Average diameter as measured by image analysis is shown ± 1 S.D.