

RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Native Human Apolipoprotein AI

Catalog No. Source

Description: Human Apolipoprotein AI

Human Apolipoprotein AI (Apo AI)

Source: High-density lipoprotein (HDL) from pooled Human plasma

Format: Purified, Liquid

Purification: >99% pure (SDS-PAGE)

Isolated by ultracentrifugal flotation between densities 1.063–1.21g/ml,

lyophilized then subjected to repeated ethanol extraction. The precipitated protein was dried under nitrogen then dissolved in 6M guanidine hydrochloride -25mM DTT. Product was then subjected to Sephacryl S200 filtration and eluted.

Concentration: 2.0mg/ml (OD280nm, $E^{0.1\%} = 1.13$)

Buffer: 3M Guanidine hydrochloride, 10mM Tris, 5mM DTT, pH 8.0

Preservative: None

Application: Apo AI can be re-natured into PBS, TBS and other common buffers by dialysis

using a membrane with a nominal molecular weight cut-off of 14,000 or less. This

should be performed in a cold room. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.

Storage: Short-term store at 2–8°C. Long term store at -20°C. Avoid multiple freeze/thaw

cycles. Storage of dialyzed Apo AI in PBS or TBS with 1mM EDTA and 0.1% Sodium Azide should be stored for up to 2 weeks at 2–8°C. Storage of Apo AI in

PBS or TBS at -20°C may lead to precipitation when thawed.

Inactivation: Not applicable



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References:

The references listed below are for research purposes only.

- 1. Chen, W., et al., (2001), "Preferential ATP-binding Cassette Transporter A1-mediated Cholesterol Efflux from Late Endosomes/Lysosomes", The Journal of Biological Chemistry, **276**(47): 43564-43569
- 2. Feng, B., et al., (2002), "ABCA1-mediated Cholesterol Efflux Is Defective in Free Cholesterol-loaded Macrophages", The Journal of Biological Chemistry, **277**(45): 43271-43280
- 3. Gerbod-Giannone, M.C., et al., (2006), "TNF alpha induces ABCA1 through NF-kappaB in macrophages and in phagocytes ingesting apoptotic cells", PNAS, **103**(9): 3112-3117
- 4. Martinez, L.O., (2003), "Phosphorylation of a Pest Sequence in ABCA1 Promotes Calpain Degradation and Is Reversed by ApoA-I", The Journal of Biological Chemistry, **278**(39): 37368-37374
- 5. Sun, Y., et al., (2003), "Stearoyl-CoA Desaturase Inhibits ATP-binding Cassette Transporter A1-mediated Cholesterol Efflux and Modulates Membrane Domain Structure", The Journal of Biological Chemistry, **278**(8): 5813-5820 6. Ishiguro, H., et al., (2001), "Retrovirus-mediated Expression of Apolipoprotein A-I in the Macrophage Protects against Atherosclerosis in Vivo", The Journal of Biological Chemistry, **276**(39): 36742-36748.