

## CERTIFICATE OF ANALYSIS

**Important Note:** Centrifuge before opening to ensure complete recovery of vial contents.

**Catalog #:** A95120H **Lot #:** 1G19522  
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**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 1.063–1.21 g/mL, lyophilized then subjected to repeated ethanol extraction. The precipitated protein was dried under nitrogen then dissolved in 6 M Guanidine Hydrochloride -25 mM DTT. Product was then subjected to Sephacryl S200 filtration and eluted.

**Concentration:** 1 mg/mL (OD280nm,  $E^{0.1\%} = 1.13$ )

**Buffer:** 3 M Guanidine Hydrochloride, 10 mM Tris, 100 mM Sodium Chloride, 1 mM EDTA, pH 7.4.

**Preservative:** 1 mM Sodium Azide

**Application:** Apo AI can be re-natured into Phosphate Buffered Saline, Tris Buffered Saline 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. Dialyzed Apo AI in Phosphate Buffered Saline or Tris Buffered Saline with 1 mM EDTA and 0.1% Sodium Azide should be stored for up to 2 weeks at 2–8°C. Storage of Apo AI in Phosphate Buffered Saline or Tris Buffered Saline at -20°C may lead to precipitation when thawed.

**Inactivation:** Not Applicable

**Safety Note(s):** Refer to the appropriate Safety Data Sheet (SDS) for additional information.

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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.

Quality Signature:



14 Jul 2022

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