



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone (800) 325-5832 (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

APOLIPOPROTEIN A-II FROM HUMAN PLASMA

Product Number **A 8909**

Storage Temperature: Below 0 °C

Product Description

Approximately 97% pure by SDS-PAGE. Lyophilized from a solution containing approximately 1 mg protein (Lowry) per ml in 0.01 M ammonium bicarbonate. The molecular weight is reported to be 17,380 daltons¹ and the pI value is 4.88.^{2,3}

Apolipoprotein A-II (Apo A-II) constitutes approximately 20% of the protein moiety of high density lipoprotein (HDL). It consists of two identical subunits linked by a disulfide bond.⁴ Apo A-II has 77 amino acid residues with glutamine as C-terminal and pyrrolidonecarboxylic acid (PCA) as N-terminal.⁵ It is readily soluble in buffer containing urea or SDS and shows self-association to form dimers in aqueous solutions with an association constant of $5 \times 10^4 \text{M}^{-1}$.⁶ The association is accompanied by an enhancement of approximately 35% in a α -helical content.⁷

Unlike Apo A-I, Apo A-II possesses no activating properties for lectin-cholesterol acyltransferase (LCAT).

Furthermore, it was found that Apo A-II inhibits the activation of LCAT by Apo A-I.^{8,9}

References

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4. Lux, S.E., et al., J. Biol. Chem., 247, 7510-7518, (1972).
5. Brewer, H.B., et al., Proc. Natl. Acad. Sci. USA, 69, 1304-1308, (1972).

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