

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Apolipoprotein A-IV/ApoA4 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 988829
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived human Apolipoprotein A-IV/ApoA4 protein Glu21-Ser396 Accession # P06727
<b>Conjugate</b>	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
<b>Formulation</b>	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

<b>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunohistochemistry</b>	Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

#### BACKGROUND

Apolipoprotein A-IV (ApoA4) is a 45 kDa glycoprotein of the lipid transport system. Secreted in plasma, ApoA4 is a major component of high density lipoprotein (HDL) particles and chylomicrons, and is thought to act in intestinal lipid absorption. Levels of ApoA4 may influence HDL metabolism and modulate its effects on atherogenesis (1). ApoA4 synthesis in humans is mainly confined to the small intestine, while in mice and rats, production occurs in the liver as well (2). ApoA4 shares several structural characteristics with ApoA1 and other exchangeable apolipoproteins. The core domain of human ApoA4 contains thirteen 22-amino acid tandem repeats, and nine of which are predicted to be amphipathic  $\alpha$ -helical repeats that are critical for lipid binding and self-association (3). The overall structure of a long rod-like dimer consisting of two 4-helix bundles stacked end-to-end in opposing orientations (4). Human ApoA4 is synthesized as a 396 amino acid (aa) precursor, from which a 20 aa N-terminal signal peptide is removed. Mature human ApoA4 shares 61% and 62% aa sequence identity with mouse and rat ApoA4, respectively.

#### PRODUCT SPECIFIC NOTICES

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