

Human Serpin A1/α1-Antitrypsin Alexa Fluor® 405-conjugated Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF12681V 100 µg

| DESCRIPTION | |
|--------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human Serpin A1/α1-Antitrypsin in direct ELISAs. |
| Source | Polyclonal Sheep IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant human Serpin A1/α1-Antitrypsin Glu25-Lys418 Accession # P01009 |
| Conjugate | Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm |
| Formulation | 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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

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

BACKGROUND

Serpin A1 is the archetypal member of the Serpin superfamily of the serine protease inhibitors (1). As one of the most abundant proteinase inhibitors in the circulation, it is synthesized in the liver and secreted into the bloodstream with the major function to protect tissues against neutrophil elastase. A severe serpin A1 deficiency leads to several clinical complications such as pulmonary emphysema, juvenile hepatitis, cirrhosis, and hepatocellular carcinoma (2). The deficiency is caused by point mutations in naturally occurring serpin A1 variants (over 70 are known). For example, the Z variant (Glu342 to Lys) forms intracellular inclusion bodies, is not secreted, and leads to a severe serpin A1 deficiency (3).

PRODUCT SPECIFIC NOTICES

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