

#### DESCRIPTION

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|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human $\alpha$ 1B-Glycoprotein in direct ELISAs and Western blots.                                                                                                                                                                                                  |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Human embryonic kidney cell line HEK293-derived recombinant human $\alpha$ 1B-Glycoprotein<br>Ala22-Ser495<br>Accession # EAW72575                                                                                                                                          |
| <b>Conjugate</b>          | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <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

A1BG (alpha-1 B/beta-glycoprotein; also C44 [in rodent]) is a 68-80 kDa monomeric plasma glycoprotein member of the Immunoglobulin superfamily of molecules. It is expressed by multiple cell types, principally hepatocytes in response to circulating growth hormone. Initially thought to act as an MMP inhibitor, A1BG is now known to bind to CRISP3, a distant member of a family of venomous molecules. CRISP3 is widely expressed and possesses no toxic properties. But it may play a key role in fertilization, where it temporarily blocks the reaction of PMNs to sperm in the uterus, thus increasing sperm lifespan and the likelihood of fertilization. Within this context, A1BG may regulate CRISP3 availability. A1BG has also been investigated as a biomarker in various cancers. Mature human A1BG is 474 amino acids (aa) in length (aa 22-495) and contains five V-type Ig-like domains. There is one isoform variant that utilizes Met123 as an alternative start site. Full-length human A1BG (aa 22-495) shares only 44% aa sequence identity with mouse A1BG.

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