

#### DESCRIPTION

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| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                                                       |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human Hematopoietic Prostaglandin D Synthase/HPGDS in direct ELISAs and Western blots.                              |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                                                        |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                                                   |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human Hematopoietic Prostaglandin D Synthase/HPGDS<br>Pro2-Leu199<br>Accession # O60760 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 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.

**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

Prostaglandin D Synthase (PGDS) catalyzes the conversion of prostaglandin (PG) H<sub>2</sub> to PGD<sub>2</sub>, which is a major prostanoid produced in a variety of tissues. Two types of PGDS have been isolated; the glutathione-dependent hematopoietic PGDS (HPGDS) and the glutathione-independent lipocalin-type PGDS (1). HPGDS is a cytosolic enzyme that is expressed in mast cells and antigen presenting cells (2, 3). It is the only mammalian member of the class Sigma glutathione S-transferase, showing a broad specificity towards standard transferase substrates (4). The PGD<sub>2</sub> produced by HPGDS is involved in many physiological processes such as maintaining body temperature, promotion of sleep, inhibition of platelet aggregation and bronchoconstriction (5). It also functions in immune response and acts as a mediator in allergy and inflammation (6). HPGDS-specific inhibitors may be therapeutically useful anti-allergic and anti-inflammatory drugs.

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