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# Recombinant Human PGD2 Synthase/PTGDS Protein (His Tag)

Catalog Number: PKSH032006

Note: Centrifuge before opening to ensure complete recovery of vial contents.

#### **Description**

Species Human

Source HEK293 Cells-derived Human PGD2 Synthase/PTGDS protein Met 1-Gln190, with an

C-terminal His

 Mol\_Mass
 20.1 kDa

 Accession
 P41222

**Bio-activity** Not validated for activity

### **Properties**

**Purity** > 80 % as determined by reducing SDS-PAGE.

**Endotoxin** < 1.0 EU per  $\mu$ g of the protein as determined by the LAL method.

**Storage** Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

**Shipping** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation** Lyophilized from sterile PBS, pH 7.4

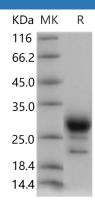
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

## Data



> 80 % as determined by reducing SDS-PAGE.

## Background

PTGDS; also known as L-PGDS; belongs to the calycin superfamily; lipocalin family. Lipocalins share limited regions of sequence homology and a common tertiary structure architecture. They transport small hydrophobic molecules such as steroids; bilins; retinoids; and lipids. PTGDS is a glutathione-independent prostaglandin D synthase that catalyzes the conversion of PGH2 to PGD2. It is involved in smooth muscle contraction/relaxation and a variety of central nervous system functions. PTGDS may have an anti-apoptotic role in oligodendrocytes. It binds small non-substrate lipophilic molecules; including biliverdin; bilirubin; retinal; retinoic acid and thyroid hormone; and may act as a scavenger for harmful hydrophopic molecules and as a secretory retinoid and thyroid hormone transporter. It is likely to play important roles in both maturation and maintenance of the central nervous system and male reproductive system.

#### For Research Use Only

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