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

Catalog Number: PKSH030653



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

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 Species
 Human

 Mol\_Mass
 19.7 kDa

 Accession
 P41222

**Bio-activity** Not validated for activity

#### **Properties**

**Purity** > 95 % as determined by reducing SDS-PAGE.

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

Storage Storage Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel

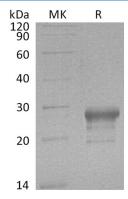
packs. Upon receipt, store it immediately at < - 20°C.

Formulation Supplied as a 0.2 μm filtered solution of 20mM Tris-HCl, 150mM NaCl, 10% Glycerol,

pH 7.5.

**Reconstitution** Not Applicable

### Data



> 95 % as determined by reducing SDS-PAGE.

## Background

Prostaglandin-H2 D-Isomerase (PTGDS) belongs to the Lipocalin family of calycin superfamily. PTGDS is preferentially expressed in the brain. PTGDS catalyzes the conversion of PGH2 to PGD2; a prostaglandin involved in smooth muscle contraction/relaxation and a potent inhibitor of platelet aggregation. PTGDS is involved in a variety of CNS functions; such as sedation; REM sleep and PGE2-induced allodynia; and may have an anti-apoptotic role in oligodendrocytes. PTGDS binds small non-substrate lipophilic molecules and may act as a scavenger for harmful hydrophopic molecules and a secretory retinoid and thyroid hormone transporter. It possibly participates in development and maintenance of the blood-brain; blood-retina; blood-aqueous humor; blood-testis barrier; the central nervous system and male reproductive system.

## For Research Use Only