Recombinant Protein Technical Manual

Recombinant Human PGD2 Synthase/PTGDS Protein (His Tag)

RPES4725

Product Data:

Product SKU: RPES4725

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P41222

Protein Information:

Molecular Mass: 19.7 kDa

AP Molecular Mass: 20-27 kDa

Tag: C-6His

Bio-activity:

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

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

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 TrisHCl,150mM NaCl,10%Glycerol,pH7.5.

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

Application:

Synonyms: Prostaglandin D Synthase; Prostaglandin-H2 D-Isomerase; Beta-Trace Protein; Cerebrin-28; Glutathione-Independent PGD Synthase; Lipocalin-Type Prostaglandin-D Synthase; Prostaglandin-D2 Synthase; PGD2 Synthase;PGDS; PGDS2; PTGDS; PDS

Immunogen Information:

Sequence: Ala23-Gln190

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.