



Recombinant Protein Technical Manual

Recombinant Human PGD2 Synthase/PTGDS Protein (His Tag) RPES1366

Product Data:

Product SKU: RPES1366

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: P41222

Protein Information:

Molecular Mass: 20.1 kDa

AP Molecular Mass: 28 kDa

Tag: C-His

Bio-activity:

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

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

Storage: 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

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: Met 1-Gln190

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 hydrophobic 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.