Recombinant Human PGD2 Synthase/PTGDS Protein (His Tag)

Catalog No. PKSH032006

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

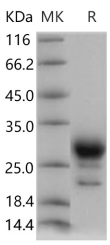
Description

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
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Gln190
Accession	P41222
Calculated Molecular Weight	20.1 kDa
Observed molecular weight	28 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 80 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg 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℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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% Tween80 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.

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017
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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.

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