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
Calculated MW	20.1 kDa
Observed MW	28 kDa
Accession	P41222
Bio-activity	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
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ 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	
	KDa MK R
	116
	66.2
	45.0

> 80 % as determined by reducing SDS-PAGE.

35.0

25.0 18.4 14.4

Background

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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.