

Recombinant Full Length Rat PTGDS Protein (Met1-Glu189), His-tagged

Cat. No. PTGDS-965R **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Recombinant Rat PTGDS Protein (NP_037147.1) (Met1-Glu189) was produced by HEK293 Cells expression system. This protein was expressed with a polyhistidine tag at the C-terminus.

Species

Rat

Source

HEK293

ProteinLength

1-189 a.a.

Description

PTGDS, also known as L-PGDS, belongs to the calycin superfamilylipocalin 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.

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Predicted N Terminal	Gln 25
Form	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Molecular Mass	The recombinant rat PTGDS consists of 176 amino acids and predicts a molecular mass of 20.3 kDa.
Endotoxin	< 1.0 EU per µg protein as determined by the LAL method.
Purity	> 95 % as determined by SDS-PAGE.
Stability	Samples are stable for up to twelve months from date of receipt at -70 centigrade.
Storage	Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4°C before opening to recover the entire contents.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

GENE INFORMATION

Gene Name	Ptgds prostaglandin D2 synthase (brain) [Rattus norvegicus]
Official Symbol	PTGDS

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Synonyms	PTGDS; PGDS; PGDS2; PGD2 synthase; Prostaglandin D synthase; PH2DISO;
Gene ID	25526
mRNA Refseq	NM_013015
Protein Refseq	NP_037147
UniProt ID	P22057

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