Mouse PTGDS / L-PGDS Protein (His Tag)

Catalog Number: 51472-M08H



General Information

Gene Name Synonym:

21kDa; L-PGDS; PGD2; PGDS; PGDS2; Ptgs3

Protein Construction:

A DNA sequence encoding the mouse Ptgds (NP_032989.2) (Met1-Glu189) was expressed with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

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

Endotoxin:

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

Stability:

Samples are stable for up to twelve months from date of receipt at -70 $^{\circ}$ C

Predicted N terminal: Gln 25

Molecular Mass:

The recombinant mouse Ptgds consists 176 amino acids and predicts a molecular mass of 19.9 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

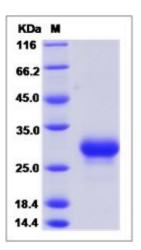
Store it under sterile conditions at $-20\,^\circ\!\mathrm{C}$ to $-80\,^\circ\!\mathrm{C}$ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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.

References

1.Aebersold R, *et al.* (1993) Identification of a brain-specific human cerebrospinal fluid glycoprotein, beta-trace protein. Theor Electrophor. 3:229-234. 2.Oliver K, *et al.* (2004) DNA sequence and analysis of human chromosome 9. Nature. 429:369-374. 3.Bonaldo MF, *et al.* (1997) Normalization and subtraction: two approaches to facilitate gene discovery. Genome Res. 6(9):791-806.

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