PRODUCT INFORMATION



Prostaglandin D Synthase (lipocalin-type; mouse) Polyclonal Antibody

Item No. 10004344

Overview and Properties

This vial contains 500 µl of lyophilized protein A-purified polyclonal antibody. Contents:

Synonyms: L-PGDS, Lipocalin-PGDS Immunogen: Mouse recombinant L-PGDS

Species Reactivity: (+) Human and mouse; other species not tested

009114 **Uniprot No.:** Form: Solid

-20°C (as supplied) Storage:

Stability: ≥3 years

Storage Buffer: TBS, pH 7.4, when reconstituted in 500 µl double distilled water

Host:

Immunohistochemistry (IHC) and Western blot (WB); the recommended starting Applications:

dilution is 1:500 and 1:200, respectively. Other applications were not tested, therefore

optimal working concentration/dilution should be determined empirically.

Image

1 2 3 4



Lane 1: His-tagged recombinant mouse

H-PGDS (0.05 μg)

Lane 2: GST-tagged recombinant mouse

L-PGDS (0.01 μg)

Lane 3: GST-tagged recombinant mouse L-PGDS (0.05 μg)

Lane 4: Mouse brain homogenate

1,000 x g supernatant (60 μg)

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 10/10/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

Prostaglandin D synthase (PGDS) catalyzes the isomerization of PGH_2 to produce PGD_2 . PGD_2 induces sleep, regulates nociception, inhibits platelet aggregation, and acts as an allergic mediator. Two distinct types of PGDS have been identified, namely the lipocalin type enzyme (β -trace) and the hematopoietic enzyme. Lipocalin-type PGDS (L-PGDS) is localized in the central nervous system, genital organs of various mammals, and the human heart. Patients with chronic renal failure and hypertension exhibit elevated amounts of L-PGDS in serum and urine. The L-PGDS has been identified as β -trace, which is a major protein in the human cerebrospinal fluid. Human L-PGDS is a 190 amino acid protein and can be detected at 24-26 kDa by immunoblotting.

References

- 1. Eulitz, K., Yurawecz, M.P., Sehat, N., *et al.* Preparation, separation, and confirmation of the eight geometrical cis/trans conjugated linoleic acid isomers 8,10- through 11,13-18:2. *Lipids* **34(8)**, 873-877 (1999).
- 2. Toh, H., Kubodera, H., Nakajima, N., et al. Glutathione-independent prostaglandin D synthase as a lead molecule for designing new functional proteins. *Protein Engineering* **9(12)**, 1067-1082 (1996).
- 3. Tokugawa, Y., Kunishige, I., Kuboto, Y., et al. Lipocalin-type prostaglandin D synthase in human male reproductive organs and seminal plasma. *Biol. Reprod.* **58(2)**, 600-607 (1998).
- 4. Melegos, D.N., Diamandis, E.P., Oda, H., et al. Immunofluorometric assay of prostaglandin D synthase in human tissue extracts and fluids. *Clin. Chem.* **42(12)**, 1984-1991 (1996).
- 5. Kanaoka, Y., Fujimori, K., Kikuno, R., et al. Structure and chromosomal localization of human and mouse genes for hematopoietic prostaglandin D synthase. Eur. J. Biochem. **267(11)**, 3315-3322 (2000).
- 6. Hirawa, N., Uehara, Y., Yamakado, M., et al. Lipocalin-type prostaglandin D synthase in essential hypertension. *Hypertension* **39(part 2)**, 449-454 (2002).
- 7. Zahn, M., Mäder, A., Schmidt, B., *et al.* Purification and N-terminal sequence of β-trace, a protein abundant in human cerebrospinal fluid. *Neurosci. Lett.* **154(1-2)**, 93-95 (1993).

ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335

WWW.CAYMANCHEM.COM