

# PRODUCT INFORMATION



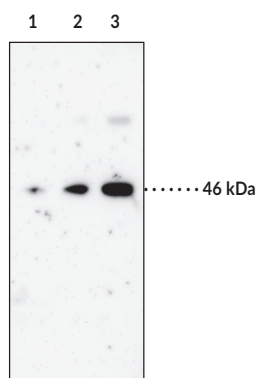
## Prostaglandin D Synthase (lipocalin-type; human) Monoclonal Antibody (Clone 10A5)

Item No. 10004342

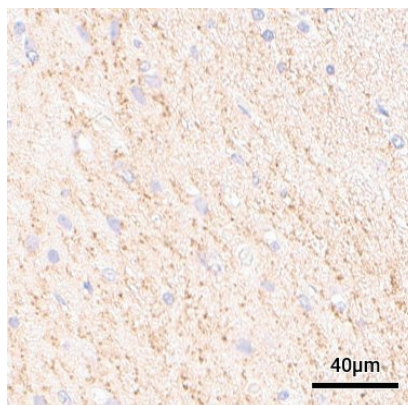
### Overview and Properties

<b>Contents:</b>	This vial contains 200 µg of ion-exchange chromatography purified antibody.
<b>Synonyms:</b>	β-trace protein, Cerebrin-28, Glutathione-independent PGD Synthase, L-PGDS, Lipocalin-PGDS, PGDS2, Prostaglandin-H2 D-isomerase
<b>Immunogen:</b>	Recombinant human L-PGD synthase
<b>Species Reactivity:</b>	(+) Human and mouse; other species not tested
<b>Uniprot No.:</b>	P41222
<b>Form:</b>	Lyophilized
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥1 year
<b>Storage Buffer:</b>	PBS, pH 7.2, when reconstituted in 500 µl deionized water
<b>Clone:</b>	10A5
<b>Host:</b>	Rat
<b>Isotype:</b>	IgG <sub>1k</sub>
<b>Applications:</b>	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution for WB is 1:200 for 1 hour incubation at room temperature. The recommended starting dilution for immunohistochemistry is also 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Images



**Lane 1:** Human Recombinant L-PGD Synthase (GST tagged, Item No. 10006788) (20 ng)  
**Lane 2:** Human Recombinant L-PGD Synthase (GST tagged, Item No. 10006788) (50 ng)  
**Lane 3:** Human Recombinant L-PGD Synthase (GST tagged, Item No. 10006788) (100 ng)



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) human brain tissue after heat induced antigen retrieval in pH 6.0 citrate buffer. After incubation with Prostaglandin D Synthase (lipocalin; human) Monoclonal Antibody (Clone 10A5) (Item No. 10004342) at a 1:200 dilution, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen (DAB).

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

**SAFETY DATA**  
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**  
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## Description

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Prostaglandin D synthase (PGDS) catalyzes the isomerization of PGH<sub>2</sub> to produce PGD<sub>2</sub>. PGD<sub>2</sub> 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 ( $\beta$ -trace) and the hematopoietic enzyme.<sup>1,2</sup> Lipocalin-type PGDS (L-PGDS) is localized in the central nervous system, genital organs of various mammals, and the human heart.<sup>1,3-5</sup> Patients with chronic renal failure and hypertension exhibit elevated amounts of L-PGD synthase in serum and urine.<sup>6</sup> The L-PGDS has been identified as  $\beta$ -trace (~24 kDa), which is a major protein in the human cerebrospinal fluid.<sup>2,7</sup>

## References

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1. Urade, Y., Watanabe, K., and Hayaishi, O. Prostaglandin D, E, and F synthases. *J. Lipid Mediators Cell Signalling* **12**, 257-273 (1995).
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7. Zahn, M., Mäder, A., Schmidt, B., *et al.* Purification and N-terminal sequence of  $\beta$ -trace, a protein abundant in human cerebrospinal fluid. *Neurosci. Lett.* **154**, 93-95 (1993).

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