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Prostaglandin D Synthase Antibody (aa27-38)

Goat Polyclonal Antibody
Catalog # ALS16158

Specification

Prostaglandin D Synthase Antibody (aa27-38) - Product Information

Application	**WB, IHC**
Primary Accession	P41222
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**21kDa KDa**

Prostaglandin D Synthase Antibody (aa27-38) - Additional Information

Gene ID 5730

Other Names
Prostaglandin-H2 D-isomerase, 5.3.99.2, Beta-trace protein, Cerebrin-28, Glutathione-independent PGD synthase, Lipocalin-type prostaglandin-D synthase, Prostaglandin-D2 synthase, PGD2 synthase, PGDS, PGDS2, PTGDS, PDS

Target/Specificity
Human PTGDS / PGDS. The immunizing peptide represents the N terminus of the mature protein.

Reconstitution & Storage
Store at -20°C. Minimize freezing and thawing.

Precautions
Prostaglandin D Synthase Antibody (aa27-38) is for research use only and not for use in diagnostic or therapeutic procedures.

Prostaglandin D Synthase Antibody (aa27-38) - Protein Information

Name PTGDS

Synonyms PDS

Function
Catalyzes the conversion of PGH2 to PGD2, a prostaglandin involved in smooth muscle contraction/relaxation and a potent inhibitor of platelet aggregation (PubMed:20667974). Involved in a variety of CNS functions, such as sedation, NREM sleep and PGE2-induced allodynia, and may have an anti-apoptotic role in oligodendrocytes. 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. Possibly involved in development and maintenance of the blood-brain, blood-retina, blood-aqueous humor and blood-testis barrier. It is likely to play important roles in both maturation

and maintenance of the central nervous system and male reproductive system (PubMed:20667974, PubMed:9475419). Involved in PLA2G3-dependent maturation of mast cells. PLA2G3 is secreted by immature mast cells and acts on nearby fibroblasts upstream to PTDGS to synthesize PGD2, which in turn promotes mast cell maturation and degranulation via PTGDR (By similarity).

Cellular Location
Rough endoplasmic reticulum. Nucleus membrane. Golgi apparatus. Cytoplasm, perinuclear region. Secreted Note=Detected on rough endoplasmic reticulum of arachnoid and menigioma cells. Localized to the nuclear envelope, Golgi apparatus, secretory vesicles and spherical cytoplasmic structures in arachnoid trabecular cells, and to circular cytoplasmic structures in meningeal macrophages and perivascular microglial cells. In oligodendrocytes, localized to the rough endoplasmic reticulum and nuclear envelope. In retinal pigment epithelial cells, localized to distinct cytoplasmic domains including the perinuclear region. Also secreted

Tissue Location
Abundant in the brain and CNS, where it is expressed in tissues of the blood-brain barrier and secreted into the cerebro-spinal fluid. Abundantly expressed in the heart. In the male reproductive system, it is expressed in the testis, epididymis and prostate, and is secreted into the seminal fluid. Expressed in the eye and secreted into the aqueous humor. Lower levels detected in various tissue fluids such as serum, normal urine, ascitic fluid and tear fluid. Also found in a number of other organs including ovary, fimbriae of the fallopian tubes, kidney, leukocytes

Prostaglandin D Synthase Antibody (aa27-38) - Protocols

Provided below are standard protocols that you may find useful for product applications.

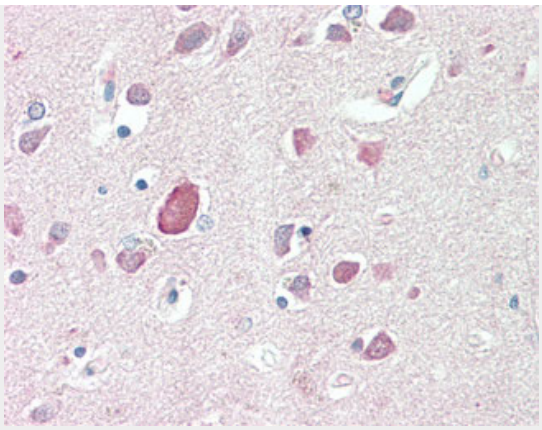
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Prostaglandin D Synthase Antibody (aa27-38) - Images



PTGDS antibody (0.3 ug/ml) staining of Human Cerebellum lysate (35 ug protein in RIPA buffer).

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Anti-PTGDS / PGDS antibody IHC staining of human brain, cortex.

Prostaglandin D Synthase Antibody (aa27-38) - Background

Catalyzes the conversion of PGH2 to PGD2, a prostaglandin involved in smooth muscle contraction/relaxation and a potent inhibitor of platelet aggregation. Involved in a variety of CNS functions, such as sedation, NREM sleep and PGE2-induced allodynia, and may have an anti-apoptotic role in oligodendrocytes. 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. Possibly involved in development and maintenance of the blood-brain, blood-retina, blood-aqueous humor and blood-testis barrier. It is likely to play important roles in both maturation and maintenance of the central nervous system and male reproductive system.

Prostaglandin D Synthase Antibody (aa27-38) - References

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