abcam

Product datasheet

Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] - BSA and Azide free ab236119

Recombinant RabMAb

3 Images

Overview

Product name	Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] - BSA and Azide free
Description	Rabbit monoclonal [EP12357] to Prostaglandin D Synthase (Lipocalin)/PDS - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, ICC/IF, WB
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Prostaglandin D Synthase (Lipocalin)/PDS aa 100 to the C-terminus. The exact sequence is proprietary. Database link: P41222 (Peptide available as ab188544)
Positive control	IHC-P: Human prostate tissue.
General notes	ab236119 is the carrier-free version of ab182141 This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency. Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. Ab236119 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. *Maxpar® is a trademark of Fluidigm Canada Inc.* This product was previously labelled as Prostaglandin D Synthase (Lipocalin) This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP12357
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab236119** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

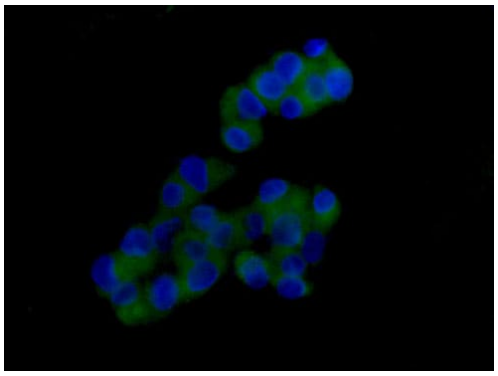
Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 28 kDa (predicted molecular weight: 21 kDa).Can be blocked with Prostaglandin D Synthase (Lipocalin)/PDS peptide (ab188544).

Target

Function	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.
Tissue specificity	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.
Sequence similarities	Belongs to the calycin superfamily. Lipocalin family.
Developmental stage	Expression in the amniotic fluid increases dramatically during weeks 12 to 25 of pregnancy. Levels decrease slowly after 25 weeks.
Domain	Forms a beta-barrel structure that accommodates hydrophobic ligands in its interior.
Post-translational modifications	Both N-glycosylation recognition sites are almost quantitatively occupied by N-glycans of the biantennary complex type, with a considerable proportion of structures bearing a bisecting GlcNAc. Agalacto structure as well as sialylated and nonsialylated oligosaccharides bearing alpha2-3- and/or alpha2-6-linked NeuNAc are present.
Cellular localization	Rough endoplasmic reticulum. Nucleus membrane. Golgi apparatus. Cytoplasm > perinuclear region. Secreted. 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.

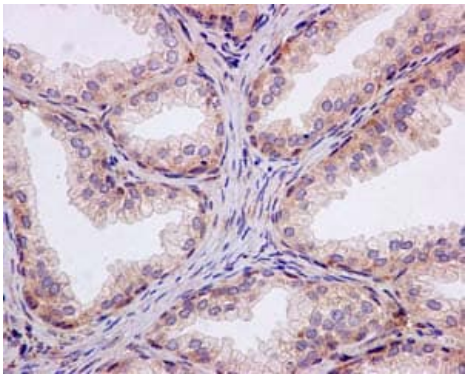
Images



Immunocytochemistry/ Immunofluorescence - Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] - BSA and Azide free (ab236119)

Immunofluorescent analysis of 4% paraformaldehyde-fixed HepG2 cells labeling Prostaglandin D Synthase (Lipocalin)/PDS with ab182141 at 1/100 dilution, followed by Goat anti rabbit IgG (Alexa Fluor®488) secondary antibody at 1/200 dilution. Counterstained with DAPI.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab182141).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] - BSA and Azide free (ab236119)

Immunohistochemical analysis of paraffin-embedded Human prostate tissue labeling Prostaglandin D Synthase (Lipocalin)/PDS with ab182141 at 1/100 dilution, followed by prediluted HRP Polymer for Rabbit IgG. Counterstained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab182141).

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] - BSA and Azide free (ab236119)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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