abcam

Product datasheet

Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] ab182141

יועדער RabMAb

★★★★★ 1 Abreviews 9 References

画像数8

製品の概要

製品名 Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357]

製品の詳細 Rabbit monoclonal [EP12357] to Prostaglandin D Synthase (Lipocalin)/PDS

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P, ICC/IF

種交差性 交差種: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

(Peptide available as ab188544)

ポジティブ・コントロール WB:HepG2, SW480, and THP-1 whole cell lysate IHC-P: Human glioma ICC/IF: HepG2 cells

特記事項 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.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリモノ モノクローナル

クローン名 EP12357

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab182141の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/10000. Detects a band of approximately 28 kDa (predicted molecular weight: 21 kDa).Can be blocked with Prostaglandin D Synthase (Lipocalin)/PDS peptide (ab188544) .
IHC-P		1/200. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/200.

ターゲット情報

機能

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 antiapoptotic 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.

組織特異性

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.

配列類似性

Belongs to the calycin superfamily. Lipocalin family.

発生段階

Expression in the amniotic fluid increases dramatically during weeks 12 to 25 of pregnancy. Levels decrease slowly after 25 weeks.

ドメイン

Forms a beta-barrel structure that accommodates hydrophobic ligands in its interior.

翻訳後修飾

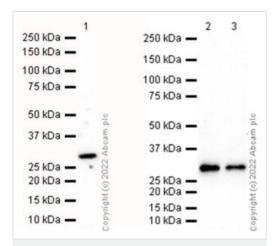
Both N-glycosylation recognition sites are almost quantitatively occupied by N-glycans of the biantennary complex type, with a considerable proportion of structures bearing a bisecting GlcNAc. Agalacto structure as well as sialylated and nonsialylated oligosaccharides bearing alpha2-3- and/or alpha2-6-linked NeuNAc are present.

細胞内局在

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

画像



Western blot - Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] (ab182141)

All lanes : Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] (ab182141) at 1/10000 dilution

Lane 1 : HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate at 15 μg

Lane 2: SW480 (Human colorectal adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 3 : THP-1 (Human monocytic leukemia monocyte) whole cell lysate at 20 µg

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Developed using the ECL technique.

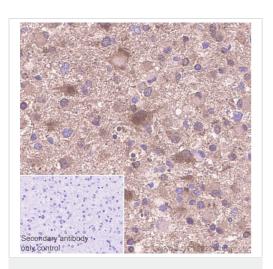
Performed under reducing conditions.

Predicted band size: 21 kDa

Exposure time: 60 seconds

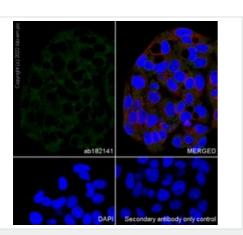
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Primary and secondary antibodies: incubated for 1h at room temperature.



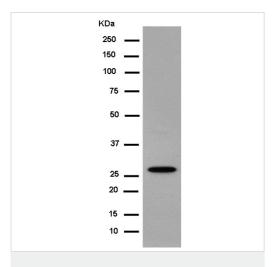
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prostaglandin D
Synthase (Lipocalin)/PDS antibody [EP12357]
(ab182141)

The human glioma paraffin-embedded sections were Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins and labeling ab182141 at 1/200 dilution for 30 mins at room temperature, then followed by Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin.



Immunocytochemistry/ Immunofluorescence - Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] (ab182141)

HepG2 cells were fixed in 4% PFA and permeabilized with 0.1% Triton X-100. Primary antibody, ab182141 at 1/200 was incubated overnight at 4° C, followed by AlexaFluor® 488-conjugated Goat anti- Rabbit secondary antibody (ab150081) at 1/1000 dilution at RT for 45 min. ab195889 AlexaFluor® 594-conjugated Anti-alpha Tubulin, used as a counterstain at 1/200 dilution, was co-incubated with ab182141 overnight at 4° C. Nucleus were visualized using DAPI.



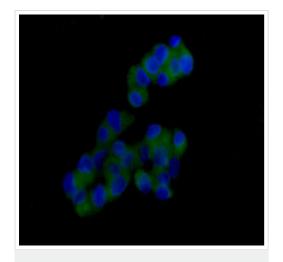
Western blot - Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] (ab182141)

Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] (ab182141) at 1/1000 dilution + HepG2 (Human liver hepatocellular carcinoma cell line) cell lysate at 10 µg

Secondary

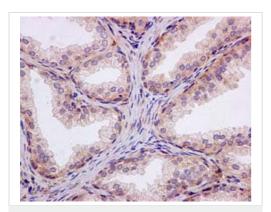
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 21 kDa Observed band size: 28 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] (ab182141)

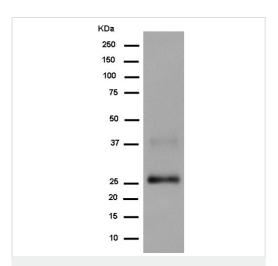
Immunofluorescent analysis of 4% paraformaldehyde-fixed HepG2 cells labeling Prostaglandin D Synthase (Lipocalin)/PDS with ab182141 at 1/100 dilution, followed by Goat anti rabbit lgG (Alexa Fluor®488) secondary antibody at 1/200 dilution. Counterstained with DAPI.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] (ab182141)

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.

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



Western blot - Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] (ab182141) Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] (ab182141) at 1/1000 dilution + Human fetal brain lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab136636) at 1/500 dilution

Predicted band size: 21 kDa Observed band size: 28 kDa

Why choose a recombinant antibody?



Research with confidence Consistent and reproducible results



Long-term and scalable supply Recombinant technology



specificity





Success from the Ethical standards compliant Animal-free production

Anti-Prostaglandin D Synthase (Lipocalin)/PDS antibody [EP12357] (ab182141)

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