Anti-Prostaglandin D Synthase Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R010137

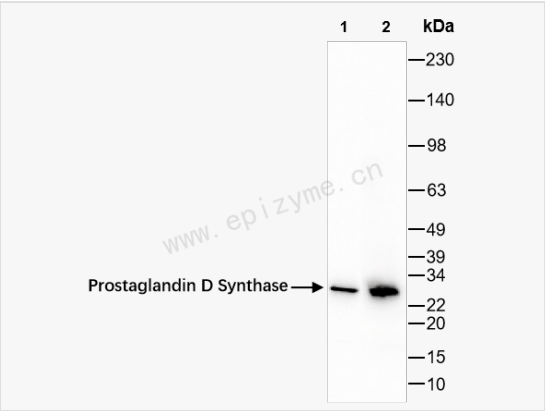
Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse
Dilution	WB 1:1,000~1:2,000; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	16L39L18
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Prostaglandin D Synthase
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Prostaglandin D Synthase Rabbit mAb [16L39L18] is for research use only and not for use in diagnostic or therapeutic procedures.

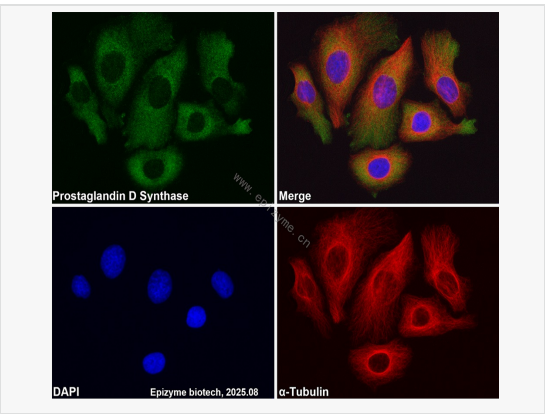
Protein Information

Synonyms	PDS; PTGDS; Prostaglandin-H2 D-isomerase; Beta-trace protein; Cerebrin-28; Glutathione-independent PGD synthase; Lipocalin-type prostaglandin-D synthase; Prostaglandin-D2 synthase; L-PGDS; PGD2 synthase; PGDS; PGDS2.
Calculated MW	Calculated MW: 21 kDa; Observed MW: 26 kDa
Uniprot ID	P41222
Gene ID	5730
Background	The protein encoded by this gene is a glutathione-independent prostaglandin D synthase that catalyzes the conversion of prostaglandin H2 (PGH2) to postaglandin D2 (PGD2). PGD2 functions as a neuromodulator as well as a trophic factor in the central nervous system. PGD2 is also involved in smooth muscle contraction/relaxation and is a potent inhibitor of platelet aggregation. This gene is preferentially expressed in brain. Studies with transgenic mice overexpressing this gene suggest that this gene may be also involved in the regulation of non-rapid eye movement sleep. [provided by RefSeq, Jul 2008]
Cellular Location	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.

Validation Images



Western Blot - Anti-Prostaglandin D Synthase Rabbit mAb [16L39L18]
All lanes: R010137 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: Mouse heart whole tissue lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 21 kDa
Observed band size: 26 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-Prostaglandin D Synthase Rabbit mAb [16L39L18]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R010137 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).