

## Product datasheet

# Recombinant Human Prostaglandin D Synthase (Lipocalin) protein ab125636

### 概述

产品名称	重组人Prostaglandin D Synthase (Lipocalin)蛋白
蛋白长度	Full length protein

### 描述

性质	Recombinant
来源	Escherichia coli

### 氨基酸序列

Accession [P41222](#)

种属 Human

序列  
 MGSSHHHHHH SGLVPRGSH MAPEAQVSVQ  
 PNFQQDKFLG RWFSAGLASN SSWLREKKA  
 LSMCKSVVAP ATDGGLNLTS TFLRKNQCET  
 RTMLLQPAGS LGSYSYRSPH WGSTYSVSVV  
 ETDYDQYALL YSQGSKGPGE DFRMATLYSR  
 TQTPRAELKE KFTAFCKAQG FTEDTIVFLP  
 QTDKCMTEQ

分子量 21 kDa including tags

氨基酸 23 to 190

标签 His tag N-Terminus

### 技术指标

Our [Abpromise guarantee](#) covers the use of **ab125636** in the following tested applications.

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

应用	SDS-PAGE
纯度	> 90 % SDS-PAGE. ab125636 is purified by proprietary chromatographic techniques.
形式	Liquid

## 稳定性和存储

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.

pH: 8.00

Constituents: 0.02% DTT, 0.32% Tris HCl, 0.03% EDTA, 30% Glycerol, 0.58% Sodium chloride

## 常规信息

### 功能

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 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.

### 组织特异性

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.

### 序列相似性

Belongs to the calycin superfamily. Lipocalin family.

### 发展阶段

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

### 结构域

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

### 翻译后修饰

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.

### 细胞定位

Rough endoplasmic reticulum. Nucleus membrane. Golgi apparatus. Cytoplasm > perinuclear region. Secreted. Detected on rough endoplasmic reticulum of arachnoid and meningioma 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.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery

- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <http://www.abcam.cn/abpromise> or contact our technical team.

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