

Rabbit Anti-PDE6B antibody

SL12585R

Product Name:	PDE6B
Chinese Name:	磷酸二酯酶6β抗体
Alias:	5"-cyclic phosphodiesterase subunit beta; Congenital stationary night blindness 3 autosomal dominant; CSNB 3; CSNB3; CSNBAD2; GMP PDE beta; GMP-PDE beta; PDE 6 beta; PDE 6B; PDE6B_HUMAN; PDEB; Phosphodiesterase 6B; Phosphodiesterase 6B cGMP specific rod beta; Rd 1; Rd1; Rod cGMP phosphodiesterase beta subunit; Rod cGMP specific 3' 5' cyclic phosphodiesterase beta subunit; Rod cGMP-specific 3"; RP40.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	66kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PDE6B:2-100/854
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Photon absorption triggers a signaling cascade in rod photoreceptors that activates cGMP phosphodiesterase (PDE), resulting in the rapid hydrolysis of cGMP, closure of

cGMP-gated cation channels, and hyperpolarization of the cell. PDE is a peripheral membrane heterotrimeric enzyme made up of alpha, beta, and gamma subunits. This gene encodes the beta subunit. Mutations in this gene result in retinitis pigmentosa and autosomal dominant congenital stationary night blindness. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2009]

Function:

This protein participates in processes of transmission and amplification of the visual signal. Necessary for the formation of a functional phosphodiesterase holoenzyme.

Subcellular Location:

Membrane.

DISEASE:

Defects in PDE6B are the cause of retinitis pigmentosa type 40 (RP40) [MIM:613801]. RP40 is a retinal dystrophy belonging to the group of pigmentary retinopathies. Retinitis pigmentosa is characterized by retinal pigment deposits visible on fundus examination and primary loss of rod photoreceptor cells followed by secondary loss of cone photoreceptors. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well.

Defects in PDE6B are a cause of congenital stationary night blindness autosomal dominant type 2 (CSNBAD2) [MIM:163500]; also known as congenital stationary night blindness Rambusch type. Congenital stationary night blindness is a non-progressive retinal disorder characterized by impaired night vision.

Similarity:

Belongs to the cyclic nucleotide phosphodiesterase family. Contains 2 GAF domains.

SWISS:

P35913

Gene ID:

5158

Database links:

Entrez Gene: 281974 Cow

Entrez Gene: 399653 Dog

Entrez Gene: 5158 Human

Entrez Gene: 18587 Mouse

Entrez Gene: 289878 Rat

Omim: 180072 Human

SwissProt: P23439 Cow

SwissProt: P33726 Dog

SwissProt: P35913 Human

SwissProt: P23440 Mouse

Unigene: 623810 Human

Unigene: 654544 Human

Unigene: 1372 Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.