

Mouse PDE6 beta/PDE6B Monoclonal Antibody | anti-PDE6B antibody

Anti-PDE6 beta/PDE6B Antibody Picoband (monoclonal, 8I2D7)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126914	Mouse	Human, Mouse, Rat	Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

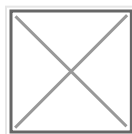
PRODUCT SYNONYMS

PDE6 beta/PDE6B; Monoclonal Antibody; Anti-PDE6 beta/PDE6B Antibody Picoband (monoclonal; 8I2D7); anti-PDE6B antibody

PRODUCT SPECIFICATIONS

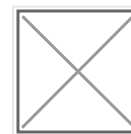
Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	Mouse IgG2a
Clone Number	8I2D7
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-PDE6B antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E Coli-derived human PDE6 beta/PDE6B recombinant protein (Position: K25-Q237).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of U2OS cells using anti-PDE6 beta/PDE6B antibody (AAA126914). Overlay histogram showing U2OS cells stained with AAA126914 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-PDE6 beta/PDE6B Antibody (AAA126914, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-mouse IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 3. IF analysis of PDE6 beta/PDE6B using anti-PDE6 beta/PDE6B antibody (AAA126914). PDE6 beta/PDE6B was detected in an immunocytochemical section of SH-SY5Y cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL mouse anti-PDE6 beta/PDE6B Antibody (AAA126914) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Mouse IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of PDE6 beta/PDE6B using anti-PDE6 beta/PDE6B antibody (AAA126914). PDE6 beta/PDE6B was detected in a paraffin-embedded section of rat eye ball tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-PDE6 beta/PDE6B Antibody (AAA126914) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (#SA1021) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of PDE6 beta/PDE6B using anti-PDE6 beta/PDE6B antibody (AAA126914). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat eye tissue lysates, Lane 2: mouse eye tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-PDE6 beta/PDE6B antigen affinity purified monoclonal antibody (#AAA126914) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PDE6 beta/PDE6B at approximately 98 kDa. The expected band size for PDE6 beta/PDE6B is at 98 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PDE6B antibody	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.
Product Categories/Family for anti-PDE6B antibody	Primary Antibodies , Mouse Monoclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	105990537
UniProt Accession #	P35913 ; Q53XN5 ; Q9BWH5 ; Q9UD49
NCBI Official Full Name	rod cGMP-specific 3',5'-cyclic phosphodiesterase subunit beta isoform 1 [Homo sapiens]
UniProt Protein Name	Rod cGMP-specific 3',5'-cyclic phosphodiesterase subunit beta
UniProt Gene Name	PDE6B
UniProt Synonym Gene Names	PDEB
UniProt Entry Name	PDE6B_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/pde6-beta-pde6b-antibody-clone-8i2d7-flow-cytometry-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/126914>