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# **Rabbit Polyclonal Anti-PDE8B antibody**

Catalog Number: PD8B-201AP

Lot Number: 194.PB4.IG

## **General Information**

Product	PDE8B Antibody
Description	Pan Phosphodiesterase 8B Antibody
Verified Applications	CM, ELISA, ICC, IF, IHC, IP, WB
Species Cross Reactivity	Bovine, Human, Monkey, Mouse, Rat
Host	Rabbit
Immunogen	Synthetic cyclic peptide common to all PDE8B variants.
Alternative Nomenclature	3' 5' cyclic nucleotide phosphodiesterase 8B antibody, Cell proliferation-inducing gene 22 protein antibody, FLJ11212 antibody, High affinity cAMP specific and IBMX insensitive 3' 5' cyclic phosphodiesterase 8B antibody, HsPDE8B antibody, PIG22 antibody

#### **Physical Properties**

Quantity	100 µg
Volume	200 µl
Form	Affinity Purified Immunoglobulins
Immunoglobulin & Concentration	0.50 mg/ml IgG in antibody stabilization buffer
Storage	Store at -20°C for long term storage.

# **Recommended Dilutions**

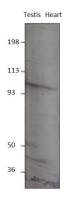
1:10,000
1:10,000
1:200
1:200
1:200
1:250
1:500-1:2,000

## **Related Products**

#### Catalog #

BIOTIN-Conjugated	PD8B-BIOTIN
FITC-Conjugated	PD8B-FITC
Antigenic Blocking Peptide	P-PD8B
Western Blot Positive Control	PC-PD8B
PDE8A Antibody	PD8A-101AP

## Application Verification:



WB of PD8B-201AP with rat testis and heart. 1:300 antibody, dilution in DiluObuffer.

Dilutions are for reference only. Applications not listed above are not necessarily precluded from working with this antibody. Investigators intending to use an application that has not been verified can request a complimentary sample.

#### Overview:

Cyclic nucleotides are important intracellular second messengers which play roles in a variety of signal transduction process. The cyclic nucleotides are hydrolyzed and compartmentalized by a family of enzymes called phosphodieterases. One of the many phosphodiesterases that compartmentalized and hydrolyze cAMP in to AMP are phosphodiesterase type 8. The cAMP-specific phosphodiesterase type-8 (PDE8) family is comprised of 2 genes (PDE8A and PDE8B) each with multiple splice variants generated by RNA splicing and use of alternate initiation sites (1). PDE8 family is a high affinity cAMP-specific, IBMX sensitive PDE. Like other PDEs, human PDE8A has 713 amino acids and migrate at apparent 100 kDa on reduced and non-reduced SDS-PAGE. The PDE8 has a significant conserved region of about 270 amino acids common to all PDEs at the carboxy terminal apparently serves as the catalytic domain. The amino-terminal region of this protein is divergent and presumably accounts for the distinctive and regulatory properties unique to the individual PDE families. PDE8A protein showed significant homology to other cAMP-dependent PDEs (23%) with in the catalytic domain. PDE8A is widely expressed in various tissues in contrast to PDE8B that is exclusively expressed in thyroid gland. The PDE8A transcripts are found in brain, pancreas, placenta, thyroid, spleen, trachea, prostate, and uterus.

FabGennix PDE-selective antibodies are directed against a particular family, or a member of the subtype or to a family-subtype-variant. Our wide selection of PDE antibodies allows detailed analysis of cyclic nucleotide signaling pathways. The PDE8B-selective antibodies were generated against a common sequence near the C-terminal end that is unique to PDE8B family members. The polyclonal antibody PD8B-201AP labels a 98-102 kDa PDE8B using Western blot positive controls or in rat testis and heart. The PDE8B-specific antiserum has no cross reactivity against PDE8A protein or any other PDE family members. The antibodies to PDE8B can be conjugated to fluorophores and other secondary enzymes as an additional service. Western blot positive control in ready-to-use SDS-sample buffer (PC-PD8B) and antigenic blocking peptides (P-PD8B) are available. For a complete listing of all FabGennix antibodies and services please visit <u>www.FabGennix.com</u>.

#### References:

- 1. Hayashi M. Molecular cloning and characterization of human PDE isozymes of3', 5'-cyclic nucleotide phosphodiesterase. Pharmacol. Toxicol. Pater session.
- 2. Farooqui S. M. Hamdi A., Brock J., Prasad C. J. Neurochem 57;1363-369, 1991.

\* For users who may require large amounts of the products listed above, please inquire about bulk material discounts. This Product is for Research Use Only and is NOT intended for use in humans or clinical diagnosis.