Datasheet for ABIN5693278

anti-PDE4D antibody (AA 466-709)

4 Images

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Overview

Quantity:	100 µg
Target:	PDE4D
Binding Specificity:	AA 466-709
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PDE4D antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Flow Cytometry (FACS), Immunocytochemistry (ICC)

Product Details

Brand:	Picoband™
Immunogen:	E. coli-derived human PDE4D recombinant protein (Position: H466-Q709).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for PDE4D detection. Tested with WB, IHC-P, IHC-F, ICC, FCM, Direct ELISA in Human,Mouse,Rat.

Target Details

Target:	PDE4D
Alternative Name:	PDE4D (PDE4D Products)

Target Details

Background:	Synonyms: cAMP-specific 3',5'-cyclic phosphodiesterase 4D, DPDE3, PDE43, PDE4D, DPDE3 Tissue Specificity: Expressed in colonic epithelial cells (at protein level). Widespread, most abundant in skeletal muscle. Isoform 6 is detected in brain. Isoform 8 is detected in brain, placenta, lung and kidney. Isoform 7 is detected in heart and skeletal muscle. Background: cAMP-specific 3',5'-cyclic phosphodiesterase 4D is an enzyme that in humans is encoded by the PDE4D gene. This gene encodes one of four mammalian counterparts to the fruit fly 'dunce' gene. The encoded protein has 3',5'-cyclic-AMP phosphodiesterase activity and degrades cAMP, which acts as a signal transduction molecule in multiple cell types. This gene uses different promoters to generate multiple alternatively spliced transcript variants that encode functional proteins.
UniProt:	Q08499
Pathways:	Cellular Response to Molecule of Bacterial Origin, cAMP Metabolic Process, Myometrial Relaxation and Contraction, Regulation of G-Protein Coupled Receptor Protein Signaling

Application Details

Application Notes:	Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P), IHC(F) and ICC. Application Details: Western blot, 0.1-0.5 µg/mL Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/mL Immunohistochemistry(Frozen Section), 0.5-1 µg/mL Immunocytochemistry, 0.5-1 µg/mL Flow Cytometry, 1-3 µg/1x10^6 cells Direct ELISA, 0.1-0.5 µg/mL
Restrictions:	For Research Use only

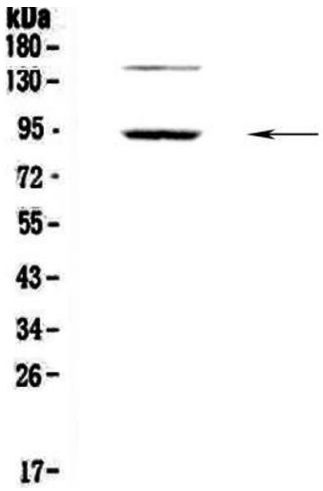
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na_2HPO_4, 0.05 mg NaN_3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

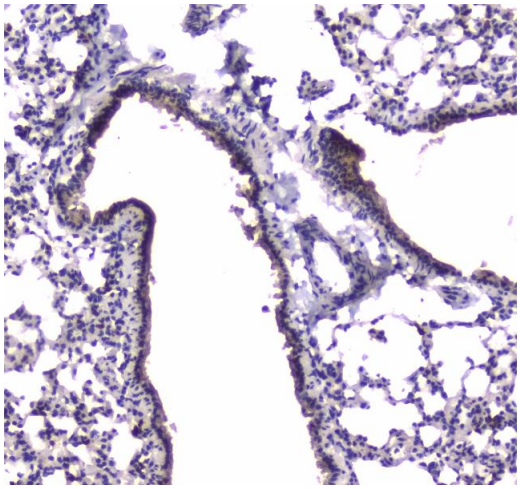
	should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Images



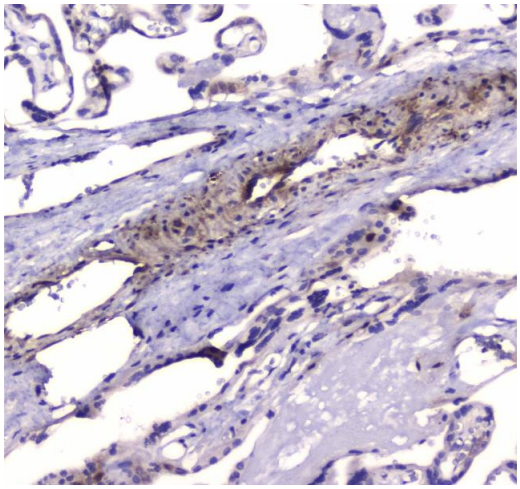
Western Blotting

Image 1. Western blot analysis of PDE4D using anti-PDE4D antibody . 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 50ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PDE4D antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit 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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PDE4D at approximately 91KD. The expected band size for PDE4D is at 91KD.



Immunohistochemistry

Image 2. IHC analysis of PDE4D using anti-PDE4D antibody . PDE4D was detected in paraffin-embedded section of mouse lung tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-PDE4D Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



Immunohistochemistry

Image 3. IHC analysis of PDE4D using anti-PDE4D antibody . PDE4D was detected in paraffin-embedded section of human placenta tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-PDE4D Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Please check the product details page for more images. Overall 4 images are available for ABIN5693278.