

Rabbit PDE4D Polyclonal Antibody | anti-PDE4D antibody

Anti-PDE4D Picoband antibody

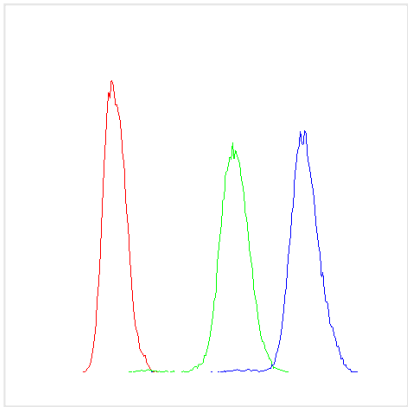
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19143	Rabbit	Human, Mouse, Rat No cross reactivity with other proteins.	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

PDE4D; Polyclonal Antibody; Anti-PDE4D Picoband antibody; cAMP-specific 3'; 5'-cyclic phosphodiesterase 4D; DPDE3; PDE43; anti-PDE4D antibody

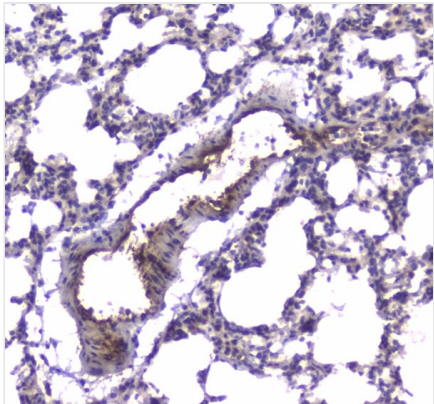
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat No cross reactivity with other proteins.
Clonality	Polyclonal
Form/Format	Lyophilized
Sequence Length	219
Applicable Applications for anti-PDE4D antibody	ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), ICC (Immunocytochemistry), WB (Western Blot)
Application Notes	WB: 0.1-0.5µg/ml Immunohistochemistry (Paraffin-embedded Section): 0.5-1µg/ml Immunohistochemistry(Frozen Section): 0.5-1µg/ml ICC: 0.5-1µg/ml FC/FACS: 1-3g/1x10 ⁶ cells Direct ELISA: 0.1-0.5µg/ml
Immunogen	E Coli-derived human PDE4D recombinant protein (Position: H466-Q709).
Subcellular Localization	Apical cell membrane.
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.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



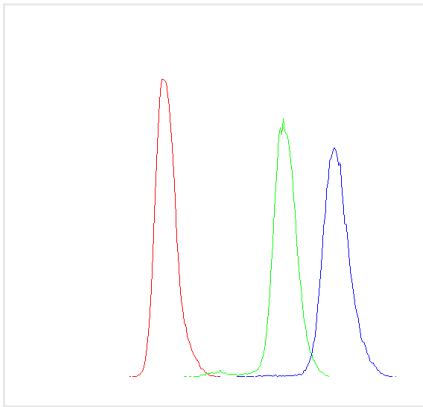
FCM (Flow Cytometry)

Figure 6. Flow Cytometry analysis of Hela cells using anti-PDE4D antibody (AAA19143).Overlay histogram showing Hela cells stained with AAA19143 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PDE4D Antibody (AAA19143,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



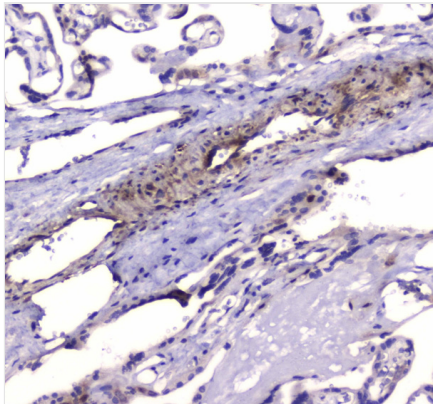
IHC (Immunohistochemistry)

Figure 4. IHC analysis of PDE4D using anti-PDE4D antibody (AAA19143).PDE4D was detected in paraffin-embedded section of rat 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 1ug/ml rabbit anti-PDE4D Antibody (AAA19143) overnight at 4 degree C. Biotinylated goat anti-rabbit 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) with DAB as the chromogen.



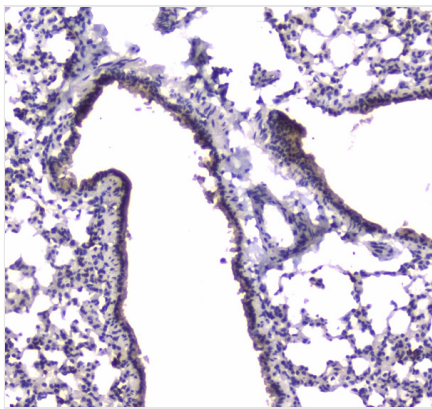
FCM (Flow Cytometry)

Figure 5. Flow Cytometry analysis of A549 cells using anti-PDE4D antibody (AAA19143).Overlay histogram showing A549 cells stained with AAA19143 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PDE4D Antibody (AAA19143,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



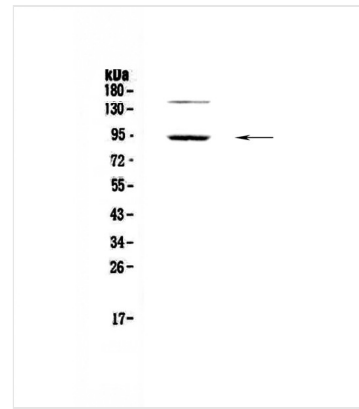
IHC (Immunohistochemistry)

Figure 3. IHC analysis of PDE4D using anti-PDE4D antibody (AAA19143).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 1ug/ml rabbit anti-PDE4D Antibody (AAA19143) overnight at 4 degree C. Biotinylated goat anti-rabbit 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) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of PDE4D using anti-PDE4D antibody (AAA19143). 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 1ug/ml rabbit anti-PDE4D Antibody (AAA19143) overnight at 4 degree C. Biotinylated goat anti-rabbit 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) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of PDE4D using anti-PDE4D antibody (AAA19143). 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 at 0.5ug/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-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 with Tanon 5200 system. A specific band was detected for PDE4D at approximately 91KD. The expected band size for PDE4D is at 91KD.

ADDITIONAL INFORMATION

Related Product Information for anti-PDE4D antibody

Description: 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.

Protein Function: Hydrolyzes the second messenger cAMP, which is a key regulator of many important physiological processes.

NCBI AND UNIPROT INFORMATION

NCBI GI #	157277988
NCBI GeneID	5144
NCBI Accession #	NP_001098101.1
NCBI GenBank Nucleotide #	NM_001104631.1
UniProt Accession #	Q08499 ; O43433 ; Q13549 ; Q13550 ; Q13551 ; Q7Z2L8 ; Q8IV84 ; Q8IVA9 ; Q8IVD2 ; Q8IVD3 ; Q96HL4 ; Q9HCX7
Molecular Weight	24,429 Da
NCBI Official Full Name	cAMP-specific 3',5'-cyclic phosphodiesterase 4D isoform PDE4D4
NCBI Official Synonym Full Names	phosphodiesterase 4D
NCBI Official Symbol	PDE4D
NCBI Official Synonym Symbols	DPDE3; PDE43; STRK1; ACRDYS2; HSPDE4D; PDE4DN2
NCBI Protein Information	cAMP-specific 3',5'-cyclic phosphodiesterase 4D
UniProt Protein Name	cAMP-specific 3',5'-cyclic phosphodiesterase 4D
UniProt Gene Name	PDE4D
UniProt Synonym Gene Names	DPDE3

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/polyclonal/pde4d-antibody-flow-cytometry-immunohistochemistry-immunocytochemistry-western-blot-elisa/19143>