

Anti-PDE12 Antibody Picoband®

Catalog Number: A10688-1

About PDE12

PDE12 is an enzyme that cleaves 2',5'-phosphodiester bond linking adenosines of the 5'-triphosphorylated oligoadenylates, triphosphorylated oligoadenylates referred as 2-5A modulates the 2-5A system. This enzyme degraded triphosphorylated 2-5A to produce AMP and ATP. It also cleaves 3',5'-phosphodiester bond of oligoadenylates and plays a role as a negative regulator of the The 2-5A system that is one of the major pathways for antiviral and antitumor functions induced by interferons (IFNs). Suppression of this enzyme induces reduction of viral replication in Hela cells, thus counteracting the antiviral pathway probably by inhibiting the 2-5A system.

Overview

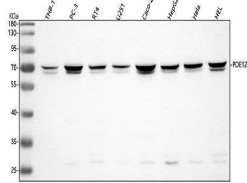
Product Name	Anti-PDE12 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PDE12 Antibody Picoband® catalog # A10688-1. Tested in ELISA, WB, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	Q6L8Q7

Technical Details

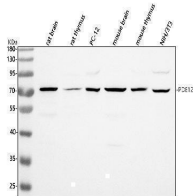
Immunogen	E.coli-derived human PDE12 recombinant protein (Position: E36-K607). Human PDE12 shares 89.9% and 91.3% amino acid (aa) sequence identity with mouse and rat PDE12, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross reactivity with other proteins.
Isotype	IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.25 µg/ml, Human, Mouse, Rat Flow Cytometry (Fixed), 1-3 µg/1x10 ⁶ cells, Human ELISA, 0.1-0.5 µg/ml, -

Anti-PDE12 Antibody Picoband® (A10688-1) Images

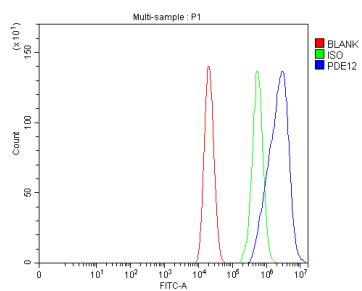


Western blot analysis of PDE12 using anti-PDE12 antibody (A10688-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human THP-1 whole cell lysates, Lane 2: human PC-3 whole cell lysates, Lane 3: human RT4 whole cell lysates, Lane 4: human U251 whole cell lysates, Lane 5: human Caco-2 whole cell lysates, Lane 6: human HepG2 whole cell lysates, Lane 7: human Hela whole cell lysates, Lane 8: human HEL whole cell 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 rabbit anti-PDE12 antigen affinity purified polyclonal antibody (Catalog # A10688-1) at 0.25 ug/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 1:5000 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 PDE12 at approximately 70 kDa. The expected band size for PDE12 is at 67,65 kDa.



Western blot analysis of PDE12 using anti-PDE12 antibody (A10688-1). 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 brain tissue lysates, Lane 2: rat thymus tissue lysates, Lane 3: rat PC-12 whole cell lysates, Lane 4: mouse brain tissue lysates, Lane 5: mouse thymus tissue lysates, Lane 6: mouse NIH/3T3 whole cell 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 rabbit anti-PDE12 antigen affinity purified polyclonal antibody (Catalog # A10688-1) at 0.5 ug/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 1:5000 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 PDE12 at approximately 70 kDa. The expected band size for PDE12 is at 67,65 kDa.

Flow Cytometry analysis of Caco-2 cells using anti-PDE12 antibody (A10688-1). Overlay histogram showing Caco-2 cells stained with A10688-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum.



And then incubated with rabbit anti-PDE12 Antibody (A10688-1, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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Anti-PDE12 Antibody

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