

Anti-MOCA/DOCK3 Antibody Picoband®

Catalog Number: A08904

About DOCK3

This gene is specifically expressed in the central nervous system (CNS). It encodes a member of the DOCK (dedicator of cytokinesis) family of guanine nucleotide exchange factors (GEFs). This protein, dedicator of cytokinesis 3 (DOCK3), is also known as modifier of cell adhesion (MOCA) and presenilin-binding protein (PBP). The DOCK3 and DOCK1, -2 and -4 share several conserved amino acids in their DHR-2 (DOCK homology region 2) domains that are required for GEF activity, and bind directly to WAVE proteins [Wiskott-Aldrich syndrome protein (WASP) family Verprolin-homologous proteins] via their DHR-1 domains. The DOCK3 induces axonal outgrowth in CNS by stimulating membrane recruitment of the WAVE complex and activating the small G protein Rac1. This gene is associated with an attention deficit hyperactivity disorder-like phenotype by a complex chromosomal rearrangement.

Overview

Product Name	Anti-MOCA/DOCK3 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-MOCA/DOCK3 Antibody Picoband® catalog # A08904. Tested in WB, IHC, Flow Cytometry, ELISA 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, IHC, 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	Q8IZD9

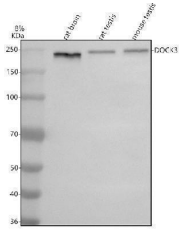
Technical Details

Immunogen	E.coli-derived human MOCA/DOCK3 recombinant protein (Position: E88-K2006). Human MOCA/DOCK3 shares 98% amino acid (aa) sequence identity with mouse MOCA/DOCK3.
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.

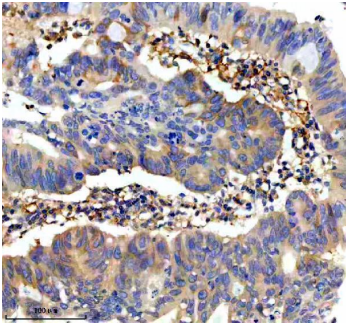
Suggested Dilutions

Western blot, 0.25-0.5 ug/ml, Mouse, Rat
Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human
Flow Cytometry (Fixed), 1-3 ug/1x10⁶ cells, Human
ELISA, 0.1-0.5 ug/ml

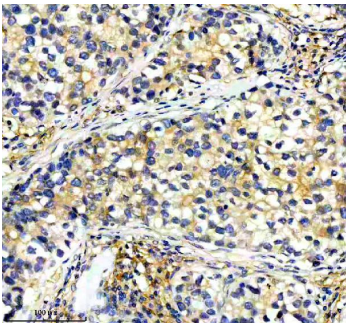
Anti-MOCA/DOCK3 Antibody Picoband® (A08904) Images



Western blot analysis of MOCA/DOCK3 using anti-MOCA/DOCK3 antibody (A08904). Electrophoresis was performed on a 8% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 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 testis tissue lysates, Lane 3: mouse brain 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 rabbit anti-MOCA/DOCK3 antigen affinity purified polyclonal antibody (A08904) 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 ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for MOCA/DOCK3 at approximately 233 kDa. The expected band size for MOCA/DOCK3 is at 233 kDa.

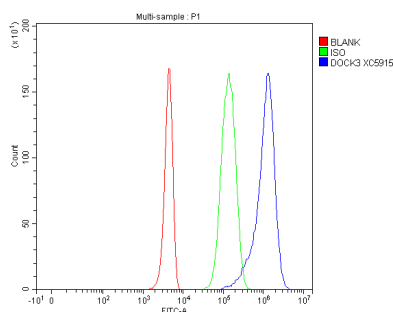


IHC analysis of MOCA/DOCK3 using anti-MOCA/DOCK3 antibody (A08904). MOCA/DOCK3 was detected in a paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-MOCA/DOCK3 Antibody (A08904) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of MOCA/DOCK3 using anti-MOCA/DOCK3 antibody (A08904). MOCA/DOCK3 was detected in a paraffin-embedded section of human lung cancer 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 rabbit anti-MOCA/DOCK3 Antibody (A08904) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

Flow Cytometry analysis of 293T cells using anti-MOCA/DOCK3 antibody (A08904). Overlay histogram showing 293T cells stained with A08904 (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-MOCA/DOCK3 Antibody (A08904, 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 without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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Anti-MOCA/DOCK3 Antibody

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