

Anti-Mbd4 Antibody Picoband®

Catalog Number: A03462-1

About Mbd4

Methyl-CpG-binding domain protein 4 is a protein that in humans is encoded by the MBD4 gene. It is mapped to 3q21.3. The protein encoded by this gene is a member of a family of nuclear proteins related by the presence of a methyl-CpG binding domain (MBD). These proteins are capable of binding specifically to methylated DNA, and some members can also repress transcription from methylated gene promoters. This protein contains an MBD domain at the N-terminus that functions both in binding to methylated DNA and in protein interactions and a C-terminal mismatch-specific glycosylase domain that is involved in DNA repair. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene.

Overview

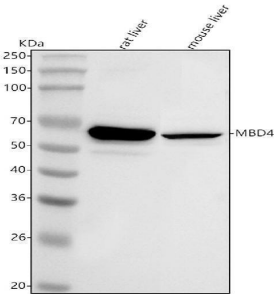
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|----------------------|--|
| Product Name | Anti-Mbd4 Antibody Picoband® |
| Reactive Species | Mouse, Rat |
| Description | Boster Bio Anti-Mbd4 Antibody Picoband® catalog # A03462-1. Tested in WB, FCM, ELISA applications. This antibody reacts with 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 | Q9Z2D7 |

Technical Details

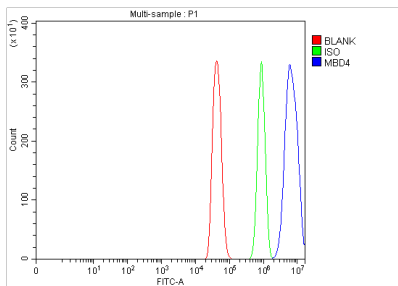
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|-------------------------------|---|
| Immunogen | E.coli-derived mouse Mbd4 recombinant protein (Position: R238-D534). Mouse Mbd4 shares 69.7% amino acid (aa) sequence identity with human MBD4. |
| Recommended Detection Systems | Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot. |
| Cross Reactivity | No cross reactivity with other proteins. |
| Isotype | IgG |

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| 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, 0.25-0.5 µg/ml, Mouse, Rat Flow Cytometry (Fixed), 1-3 µg/1x10 ⁶ cells, Mouse ELISA, 0.1-0.5 µg/ml, - |

Anti-Mbd4 Antibody Picoband® (A03462-1) Images



Western blot analysis of Mbd4 using anti-Mbd4 antibody (A03462-1). 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 liver tissue lysates, Lane 2: mouse liver 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-Mbd4 antigen affinity purified polyclonal antibody (Catalog # A03462-1) 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 Mbd4 at approximately 66 kDa. The expected band size for Mbd4 is at 63 kDa.



Flow Cytometry analysis of C2C12 cells using anti-Mbd4 antibody (A03462-1). Overlay histogram showing C2C12 cells stained with A03462-1 (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-Mbd4 Antibody (A03462-1, 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-Mbd4 Antibody

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