

Anti-Dystrophin Picoband Antibody

Catalog # ABO11967

Specification

Anti-Dystrophin Picoband Antibody - Product Information

Application WB, IHC
Primary Accession P11532
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

Description

Rabbit IgG polyclonal antibody for Dystrophin(DMD) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Dystrophin Picoband Antibody - Additional Information

Gene ID 1756

Other Names
Dystrophin, DMD

Calculated MW 426750 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Mouse, Rat, Boster's SuperVision kit
br>Western blot, 0.1-0.5 μ g/ml, Human, Mouse, Rat, Boster's ECL kit
br>

Subcellular Localization

Cell membrane, sarcolemma; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, cytoskeleton. Cell junction, synapse, postsynaptic cell membrane. In muscle cells, sarcolemma localization requires the presence of ANK2, while localization to costameres requires the presence of ANK3. Localizes to neuromuscular junctions (NMJs) in the presence of ANK2 (By similarity).

Tissue Specificity

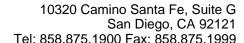
Expressed in muscle fibers accumulating in the costameres of myoplasm at the sarcolemma. Expressed in brain, muscle, kidney, lung and testis. Isoform 5 is expressed in heart, brain, liver, testis and hepatoma cells. Most tissues contain transcripts of multiple isoforms, however only isoform 5 is detected in heart and liver.

Protein Name

Dystrophin

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.





Immunogen

E.coli-derived human Dystrophin recombinant protein (Position: H3076-D3404). Human Dystrophin shares 100% amino acid (aa) sequence identity with mouse Dystrophin.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, 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.

Sequence Similarities

Contains 2 CH (calponin-homology) domains.

Anti-Dystrophin Picoband Antibody - Protein Information

Name DMD

Function

Anchors the extracellular matrix to the cytoskeleton via F- actin. Ligand for dystroglycan. Component of the dystrophin-associated glycoprotein complex which accumulates at the neuromuscular junction (NMJ) and at a variety of synapses in the peripheral and central nervous systems and has a structural function in stabilizing the sarcolemma. Also implicated in signaling events and synaptic transmission.

Cellular Location

Cell membrane, sarcolemma {ECO:0000250|UniProtKB:P11531}; Peripheral membrane protein {ECO:0000250|UniProtKB:P11531}; Cytoplasmic side {ECO:0000250|UniProtKB:P11531}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P11531}. Postsynaptic cell membrane {ECO:0000250|UniProtKB:P11531}. Note=In muscle cells, sarcolemma localization requires the presence of ANK2, while localization to costameres requires the presence of ANK3. Localizes to neuromuscular junctions (NMJs). In adult muscle, NMJ localization depends upon ANK2 presence, but not in newborn animals. {ECO:0000250|UniProtKB:P11531}

Tissue Location

Expressed in muscle fibers accumulating in the costameres of myoplasm at the sarcolemma. Expressed in brain, muscle, kidney, lung and testis. Most tissues contain transcripts of multiple isoforms. Isoform 15: Only isoform to be detected in heart and liver and is also expressed in brain, testis and hepatoma cells

Anti-Dystrophin Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

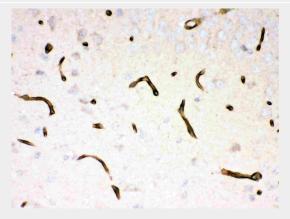


- Immunoprecipitation
- Flow Cytomety
- Cell Culture

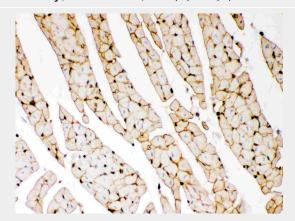
Anti-Dystrophin Picoband Antibody - Images



Anti- Dystrophin Picoband antibody, ABO11967, Western blottingAll lanes: Anti Dystrophin (ABO11967) at 0.5ug/mlLane 1: SMMC Whole Cell Lysate at 40ugLane 2: HEPA Whole Cell Lysate at 40ugPredicted bind size: 427KDObserved bind size: 427KD

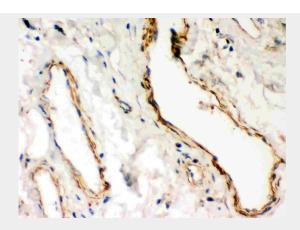


Anti- Dystrophin Picoband antibody, ABO11967, IHC(P)IHC(P): Mouse Brain Tissue



Anti- Dystrophin Picoband antibody, ABO11967, IHC(P)IHC(P): Rat Cardiac Muscle Tissue





Anti- Dystrophin Picoband antibody, ABO11967, IHC(P)IHC(P): Human Lung Cancer Tissue

Anti-Dystrophin Picoband Antibody - Background

Dystrophin, also known as DMD, is a rod-shaped cytoplasmic protein, and a vital part of a protein complex that connects the cytoskeleton of a muscle fiber to the surrounding extracellular matrix through the cell membrane. It is mapped to Xp21.2-p21.1. This complex is variously known as the costamere or thedystrophin-associated protein complex. Many muscle proteins, such as $\hat{1}\pm$ -dystrobrevin, syncoilin, synemin, sarcoglycan, dystroglycan, and sarcospan, colocalize with dystrophin at the costamere. Dystrophin is a protein located between the sarcolemma and the outermost layer of myofilaments in the muscle fiber (myofiber). It is a cohesive protein, linking actin filaments to another support protein that resides on the inside surface of each muscle fiber $\hat{a} \in \mathbb{R}^m$ s plasma membrane (sarcolemma).