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Anti-Dystrophin Antibody (Monoclonal, MANDYS8)

Catalog # ABO10428

Product Information

Application	WB, IHC-P
Primary Accession	P11530
Host	Mouse
Isotype	Mouse IgG2b
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Format	Lyophilized
Description	Mouse IgG monoclonal antibody for Dystrophin, dystrophin (DMD) detection. Tested with WB, IHC-P in Human;mouse;rat;rabbit. No cross reactivity with other proteins.
Reconstitution	Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Additional Information

Gene ID	24907
Other Names	Dystrophin, Dmd
Calculated MW	425828
Application Details	Immunohistochemistry(Paraffin-embedded Section), 2-4 □g/ml, Human, mouse, rabbit, rat, By Heat Western blot, 1-2 □g/ml, Human, mouse, rabbit, rat
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 adult muscle, NMJ localization depends upon ANK2 presence, but not in newborn animals. .
Tissue Specificity	Strongly expressed in skeletal muscle and weak expression observed in newborn brain which increases in adult brain. .
Source	Eukaryota
Protein Name	Dystrophin
Contents	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN3 as preservative.

Clone Names	MANDYS8
Immunogen	Recombinant human dystrophin fragment.
Purification	Ascites
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.

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	Strongly expressed in skeletal muscle and weak expression observed in newborn brain which increases in adult brain

Background

Dystrophin(DMD) gene has 79 exons spanning at least 2,300 kb(2.3 Mb). The C terminus of the dystrophin protein is encoded by a highly conserved, alternatively spliced region of the gene. beta-dystroglycan binding activity is expressed by the dystrophin fragment spanning amino acids 3026-3345 containing the ZZ domain. DMD transcript is formed by at least 60 exons; the first half of the transcript is formed by a minimum of 33 exons spanning nearly 1000 kb, and the remaining portion has at least 27 exons that may spread over a similar distance. Dystrophin gene is expressed at a higher level in primary cultures of neuronal cells than in astro-glial cells derived from adult mouse brain. overexpression of dystrophin prevents the development of the abnormal mechanical properties associated with dystrophic muscle without causing deleterious side effects.