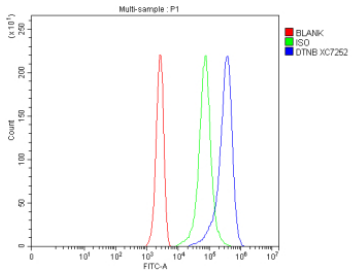
DTNB Antibody / Dystrophin Associated Protein Antibody (FY12628)

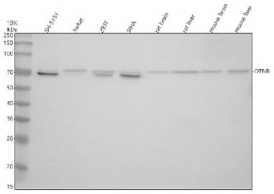
Catalog No.	Formulation	Size
FY12628	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	O60941
Applications	Western Blot: 0.25-0.5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This DTNB Antibody / Dystrophin Associated Protein Antibody is available for research use only.



DTNB Antibody Jurkat Flow Cytometry. Flow cytometric analysis of Jurkat cells stained with DTNB antibody demonstrates a clear rightward shift of the positive population (blue) relative to both the isotype control (green) and unstained control (red). The observed fluorescence profile is consistent with expression of DTNB (Dystrobrevin Alpha), a cytoplasmic scaffold protein that functions as a component of the dystrophin-associated protein complex and contributes to cytoskeletal organization, membrane stability, and intracellular signaling. The distinct separation between DTNB antibody-stained cells and control populations supports specific detection of endogenous DTNB by flow cytometry. Cells were fixed with 4% paraformaldehyde, blocked with 10% normal goat serum, and stained with DTNB antibody at 1 ug/million cells followed by DyLight 488-conjugated goat anti-rabbit IgG secondary antibody. Isotype control cells were stained with rabbit IgG under identical conditions.



DTNB Antibody Human Mouse Rat WB. Western blot analysis of 1) human SH-SY5Y, 2) human Jurkat, 3) human 293T, 4) human SiHa, 5) rat brain, 6) rat liver, 7) mouse brain, and 8) mouse liver lysates using DTNB antibody. A prominent immunoreactive band is detected at approximately 66-70 kDa, consistent with the expected molecular weight range of Dystrobrevin Beta (DTNB). Human cell lysates exhibit a closely spaced doublet near 70 kDa, which may reflect alternatively spliced isoforms or post-translationally modified forms of DTNB. In contrast, rat and mouse tissue lysates predominantly display a single major band corresponding to the conserved DTNB protein. Dystrobrevin Beta is a component of the dystrophin-associated protein complex involved in cytoskeletal organization, membrane stability, and intracellular signaling. The observed cross-species reactivity supports the utility of this DTNB antibody for western blot detection of endogenous DTNB expression in both human and rodent samples. Predicted molecular weight: ~66-70 kDa.

Description

DTNB Antibody / Dystrophin Associated Protein Antibody recognizes DTNB (Dystrobrevin Alpha), a cytoplasmic scaffold protein that functions as a core component of the dystrophin-associated protein complex. DTNB interacts with dystrophin, syntrophins, dystroglycans, and additional membrane-associated signaling molecules to help maintain the structural integrity and functional organization of muscle and neuronal tissues. Through these interactions, Dystrobrevin Alpha contributes to the linkage between the intracellular cytoskeleton and the plasma membrane, supporting cellular stability, signal transduction, and specialized membrane architecture.

DTNB Antibody is widely used for the investigation of skeletal muscle biology and neuromuscular function. The dystrophin-associated protein complex plays an essential role in protecting muscle fibers from mechanical stress generated during contraction and movement. DTNB serves as a molecular scaffold within this complex, helping recruit signaling proteins and organize membrane-associated signaling domains. Proper expression and localization of Dystrobrevin Alpha are important for maintaining muscle fiber integrity, membrane stability, and coordinated cellular communication in contractile tissues.

DTNB Antibody is also valuable for studies of nervous system development and synaptic organization. Dystrobrevin Alpha is expressed in neuronal tissues where it contributes to the assembly and maintenance of specialized membrane structures involved in cellular signaling and communication. Interactions between DTNB and other dystrophin complex proteins are believed to support synaptic stability, neurotransmission, and the organization of signaling pathways that regulate neuronal development and function. These properties make DTNB an important marker for investigations of neurobiology, synaptic architecture, and nervous system maintenance.

DTNB Antibody has become increasingly important in research involving muscular dystrophy, neuromuscular disease, and cytoskeletal regulation. Disruption of dystrophin-associated protein complexes can compromise membrane integrity and alter signaling pathways required for normal muscle and neuronal function. Consequently, DTNB is frequently studied alongside dystrophin and related proteins to better understand the molecular mechanisms underlying muscle degeneration, neuromuscular disorders, and tissue-specific signaling networks.

DTNB Antibody is suitable for applications involving muscle development, neuromuscular junction biology, neuronal signaling, cytoskeletal organization, and dystrophin-associated protein complex research. Because Dystrobrevin Alpha occupies a central position within membrane-associated signaling assemblies, DTNB remains an important target for studies of muscle physiology, nervous system function, and disease-associated molecular pathways.

Researchers studying cytoskeletal organization, membrane-associated signaling complexes, and cellular structural integrity may also be interested in our comprehensive collection of Cell Biology Antibodies.

Application Notes

Optimal dilution of the DTNB Antibody / Dystrophin Associated Protein Antibody should be determined by the researcher.

Immunogen

E.coli-derived human DTNB recombinant protein (Position: M1-G627) was used as the immunogen for the DTNB antibody.

Storage

After reconstitution, the DTNB antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

DTNB Antibody, Dystrobrevin Alpha Antibody, Alpha Dystrobrevin Antibody, Dystrophin Associated Protein Antibody, Dystrophin Complex Protein Antibody, Dystrophin Glycoprotein Complex Protein Antibody, Neuromuscular Junction Protein Antibody, Cytoskeletal Scaffold Protein Antibody

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