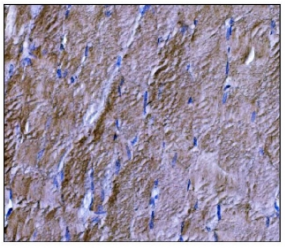
DYSF Antibody / Dysferlin Membrane Repair Protein Antibody (RQ6473)

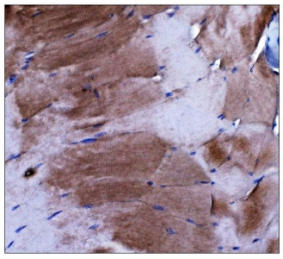
Catalog No.	Formulation	Size
RQ6473	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

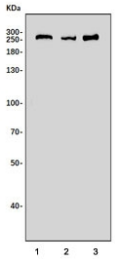
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O75923
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This DYSF Antibody / Dysferlin Membrane Repair Protein Antibody is available for research use only.



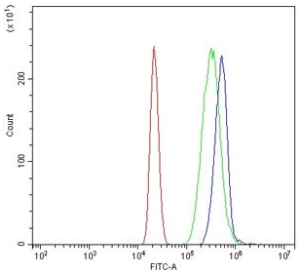
DYSF Antibody Skeletal Muscle IHC. Immunohistochemistry staining of FFPE human skeletal muscle tissue using DYSF Antibody demonstrates widespread cytoplasmic and sarcolemmal-associated HRP-DAB brown staining throughout skeletal muscle fibers. The staining pattern is consistent with expression of Dysferlin / DYSF, a ferlin family membrane repair protein that supports calcium-dependent sarcolemmal maintenance and recovery following muscle fiber injury. Signal is distributed along elongated myofibers with membranous accentuation, reflecting the established role of Dysferlin in membrane remodeling and preservation of muscle integrity in mechanically active tissues. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



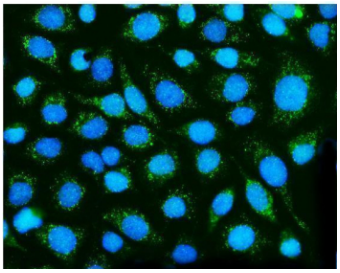
DYSF Antibody Skeletal Muscle Tissue IHC. Immunohistochemistry staining of FFPE mouse skeletal muscle tissue using DYSF Antibody demonstrates strong cytoplasmic and sarcolemmal-associated HRP-DAB brown staining throughout skeletal muscle fibers. The staining pattern is consistent with expression of Dysferlin / DYSF, a membrane repair protein that supports calcium-dependent sarcolemmal maintenance and recovery following contraction-induced membrane injury. Prominent staining within elongated myofibers highlights the established role of Dysferlin in membrane remodeling, muscle fiber stability, and preservation of skeletal muscle integrity. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



DYSF Antibody Multi-Species Heart WB. Western blot analysis of Lane 1: human PC-3 cell lysate, Lane 2: rat heart lysate, and Lane 3: mouse heart lysate using DYSF Antibody / Dysferlin Membrane Repair Protein Antibody. A band is detected at approximately 250-260 kDa in all three samples, corresponding to Dysferlin / DYSF. The observed molecular weight is modestly higher than the predicted molecular weight of approximately 237 kDa, which can occur with large membrane-associated proteins. Dysferlin is a ferlin family membrane repair protein that mediates calcium-dependent sarcolemmal restoration and maintenance of muscle cell integrity. Detection in rat and mouse heart lysates is consistent with the established expression of Dysferlin in contractile tissues that undergo continual mechanical stress and membrane remodeling.



DYSF Antibody HL60 FACS. Flow cytometric analysis of human HL60 cells using DYSF Antibody demonstrates a rightward shift of the blue population relative to the isotype control (green), consistent with detection of Dysferlin / DYSF expression. Dysferlin is a ferlin family membrane repair protein that participates in calcium-dependent membrane remodeling and cellular recovery following membrane injury. Cells were stained with 1 ug antibody per million cells following blocking with goat sera. Red = cells alone, Green = isotype control, Blue = DYSF antibody.



Dysferlin Antibody IF/ICC. Immunofluorescence analysis of SiHa cells using Dysferlin Antibody demonstrates distinct cytoplasmic and membranous green fluorescence consistent with the established localization of Dysferlin (DYSF), a membrane-associated protein involved in sarcolemmal repair, vesicle trafficking, and membrane fusion processes. Signal is distributed throughout the cytoplasm with enrichment along cellular membranes, while nuclei are counterstained with DAPI (blue). The observed staining pattern supports studies of Dysferlin (DYSF) function, skeletal muscle membrane repair, sarcolemmal integrity, vesicle trafficking, muscular dystrophy research, and muscle fiber regeneration pathways. Enzyme antigen retrieval was performed for 15 minutes prior to staining. Target protein is visualized in green and nuclei are shown in blue.

Description

Dysferlin (DYSF) is a membrane-associated protein encoded by the DYSF gene on chromosome 2p13.2 and is a member of the ferlin family of calcium-responsive membrane trafficking proteins. Dysferlin is localized primarily to the sarcolemma and cytoplasmic vesicular compartments of skeletal and cardiac muscle, where it functions in cellular membrane repair and maintenance of muscle fiber integrity. The DYSF Antibody is valuable for investigating muscle biology, membrane restoration mechanisms, and inherited muscular dystrophy disorders. Dysferlin is also referred to as FER1L1, and DYSF antibody research frequently focuses on its role in maintaining membrane stability following cellular injury.

DYSF antibody, also known as Dysferlin antibody and Miyoshi myopathy protein antibody, recognizes a large protein containing multiple C2 domains that mediate calcium-dependent interactions with phospholipid membranes. Following membrane damage, calcium influx rapidly activates Dysferlin-mediated repair processes. Dysferlin-containing vesicles are

recruited to sites of injury where they participate in membrane patch formation and vesicle fusion events that restore plasma membrane continuity. This process is especially important in skeletal muscle because muscle fibers are routinely subjected to mechanical stress during contraction and movement.

In addition to its established role in membrane repair, Dysferlin contributes to vesicular trafficking, membrane remodeling, endocytosis, and organization of protein complexes associated with cellular architecture. The protein interacts with annexins and other membrane-associated factors involved in coordinating injury responses. These interactions help maintain tissue integrity and support recovery from mechanical damage. Dysferlin expression is particularly prominent in skeletal muscle fibers, although expression has also been reported in cardiac muscle, monocytes, macrophages, and additional cell populations involved in tissue maintenance and repair.

Mutations in DYSF are associated with several inherited neuromuscular disorders, including Limb-Girdle Muscular Dystrophy R2 and Miyoshi Myopathy. These diseases result from impaired membrane repair capacity, leading to progressive muscle degeneration and weakness. Consequently, Dysferlin has become an important biomarker in studies examining muscular dystrophy pathogenesis, regenerative medicine, and therapeutic intervention strategies designed to preserve muscle function.

DYSF antibody investigations continue to expand as researchers explore additional functions of Dysferlin in inflammatory responses, tissue regeneration, and membrane homeostasis. A DYSF antibody can support research involving muscular dystrophy, membrane repair biology, vesicle trafficking, and cellular adaptation to mechanical stress. General antibody-based approaches may be used to evaluate Dysferlin expression across a variety of research applications. NSJ Bioreagents offers this DYSF antibody to support studies of membrane integrity, muscle physiology, and disease-associated cellular pathways.

Researchers studying membrane repair, vesicle trafficking, and cellular injury responses may also be interested in our Cell Biology Antibodies landing page featuring proteins involved in membrane dynamics, cytoskeletal organization, and cellular architecture.

Application Notes

Optimal dilution of the DYSF Antibody / Dysferlin Membrane Repair Protein Antibody should be determined by the researcher.

Immunogen

An E. coli-derived human protein (amino acids E51-H747) was used as the immunogen for the DYSF antibody.

Storage

After reconstitution, the DYSF 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

Dysferlin antibody, FER1L1 antibody, Muscle membrane repair antibody, Limb-girdle muscular dystrophy protein antibody, Miyoshi myopathy protein antibody