abcam

ab76746

Anti-Myoferlin antibody [7D2]

Key facts

Isotype	IgG2a
Host species	Mouse
Storage buffer	Constituents: 2% Sucrose, 1.21% Tris, 0.75% Glycine
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human MYOF. The exact immunogen used to generate this antibody is proprietary information. Database link Q9NZM1
Clone number	7D2
Purification technique	Affinity purification Protein A
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/100
Notes	ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	5 µg/mL
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information MYOF

Function	Calcium/phospholipid-binding protein that plays a role in the plasmalemma repair mechanism of endothelial cells that permits rapid resealing of membranes disrupted by mechanical stress. Involved in endocytic recycling. Implicated in VEGF signal transduction by regulating the levels of the receptor KDR (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot

Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Myoferlin alternatively known as MYOF is a member of the ferlin family proteins and plays a mechanical role in membrane repair and fusion. It has a molecular mass of approximately 230 kDa. Myoferlin expresses mainly in muscle and endothelial tissues. Its function is critical during muscle development and regeneration as it participates in the fusion of myoblasts into mature myotubes. Also Myoferlin is involved in the repair of damaged sarcolemmal membranes in muscle cells.
Biological function summary	The protein supports membrane dynamics and stabilization. Myoferlin is not part of a large complex but interacts with other proteins at the cellular membrane. It regulates cellular processes such as proliferation differentiation and endocytosis. In muscle cells it assists in the organization and function of the cytoskeleton maintaining proper cellular architecture and signaling.
Pathways	Myoferlin engages in critical roles in pathways related to cell membrane repair and trafficking. It associates with pathways like the myogenesis pathway and integrin signaling. In these pathways it interacts with other proteins such as dysferlin and caveolin-3 which facilitate membrane repair and receptor localization respectively. Myoferlin ensures efficient cellular response to membrane damage maintaining tissue integrity.
Associated diseases and disorders	Myoferlin is connected to muscular dystrophies and cancer. It correlates with the progression of muscular disorder due to its deficiency in membrane repair mechanisms. Additionally in cancer its expression levels relate to tumor invasion and metastasis involving interactions with proteins like E-cadherin and MMP-9. Investigating Myoferlin's role can aid in understanding its potential as a therapeutic target in these diseases.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

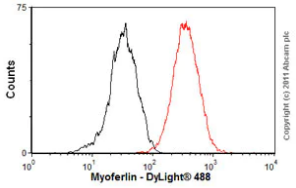
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
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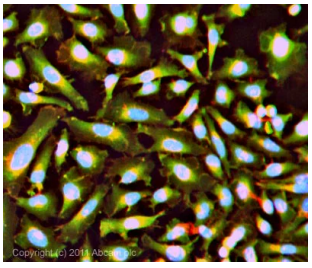
2 product images



Flow Cytometry - Anti-Myoferlin antibody [7D2] (ab76746)

Myoferlin Flow Cytometry staining using mouse Anti-Myoferlin antibody

Overlay histogram showing HeLa cells stained with ab76746 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab76746, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] (ab91361, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.



Immunocytochemistry/ Immunofluorescence - Anti-Myoferlin antibody [7D2] (ab76746)

Myoferlin Immunocytochemistry/ Immunofluorescence staining using mouse Anti-Myoferlin antibody

ICC/IF image of ab76746 stained HeLa cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab76746, 5µg/ml) overnight at +4°C. The secondary antibody (green) was ab96879, DyLight® 488 goat anti-mouse IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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