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Diagnostik & molekulare Diagnostik



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Mouse anti actin alpha-skeletal

Catalogue number: **MUB0108P**

Clone	3B3
Isotype	IgG1
Product Type	Primary Antibodies
Units	0.1 mg
Host	Mouse
Species reactivity	Goat Human Rabbit Rat Swine
Application	ELISA Immunoblotting Immunohistochemistry (frozen) Immunohistochemistry (paraffin)

Distributors

For Purchasing Information, please contact your local distributor

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Background

Among the six actin isoforms described in mammals, two are found in virtually all cells (β - and γ -cytoplasmic), two are detected in smooth muscle cells (α - and γ -smooth muscle) and two are present in striated muscles, one predominantly in skeletal (α -skeletal) and one in cardiac (α -cardiac) muscle cells. These actin isoforms differ slightly in their N-terminus, but the sequence of each of these actins is highly conserved in higher vertebrates. Skeletal α -actin may also be expressed in the mammalian heart. Although during the late stage of fetal development α -cardiac actin becomes the main isoform in the myocardium, α -skeletal actin might still make up for almost half of its total striated muscle actin content.

Source

3B3 is a Mouse monoclonal IgG1 antibody derived by fusion of NS0 Mouse myeloma cells with spleen cells from a BALB/c Mouse immunized with a peptide comprising the N-terminal nonapeptide of α -skeletal actin with an acetylated N-terminus (Ac-DEDETTALVC-COOH) coupled to keyhole limpet hemocyanin through the cysteine residue.

1_MUB0108

Paraffin sections of human striated skeletal muscle (above) and striated muscle (below) from human tongue immunostained with 3B3 (1250)



2_MUB0108

Paraffin sections of human striated skeletal muscle (above) and striated muscle (below) from human tongue immunostained

Product

Each vial contains 100 μ l 1 mg/ml purified monoclonal antibody in PBS containing 0.09% sodium azide.

Applications

3B3 is useful for immunohistochemistry on frozen and paraffin-embedded tissues, immunoblotting and ELISA. Optimal antibody dilutions should be determined by titration; recommended range is 1:100 – 1:1000 for immunohistochemistry with avidin-biotinylated Horseradish peroxidase complex (ABC) as detection reagent, and 1:1000 – 1:5000 for immunoblotting applications.

Cross Reactivity

The epitope recognized by α -SM1 is highly conserved. The antibody therefore cross-reacts with many species including protochordates, lower craniates and mammals.

Specificity

Clone 3B3 is an antibody highly specific for α -skeletal actin, and does not cross react with other actin isoforms.

Storage

Store at 4°C, or in small aliquots at -20°C.

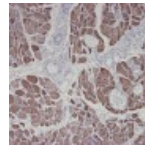
References

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Caution

This product is intended FOR RESEARCH USE ONLY, and FOR TESTS IN VITRO, not for use in diagnostic or therapeutic procedures involving humans or

with 3B3 (1250)



animals. This product contains sodium azide. To prevent formation of toxic vapors, do not mix with strong acidic solutions. To prevent formation of potentially explosive metallic azides in metal plumbing, always wash into drain with copious quantities of water. This datasheet is as accurate as reasonably achievable, but Nordic-MUbio accepts no liability for any inaccuracies or omissions in this information.