

Myosin 4 Monoclonal Antibody (MF20), eBioscience™

Product Details

Size	100 µg
Species Reactivity	Bovine, Dog, Chicken, Chimpanzee, Cat, Guinea pig, Human, Mouse, Non-human primate, Rabbit, Rat
Published Species	Artificial Control, Human, Mouse
Host/Isotype	Mouse / IgG2b, kappa
Class	Monoclonal
Type	Antibody
Clone	MF20
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage Conditions	4° C
RRID	AB_2572894

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	1 µg/mL	3 Publications
Immunofluorescence (IF)	1 µg/mL	6 Publications
Western Blot (WB)	1 µg/mL	4 Publications
Flow Cytometry (Flow)	-	1 Publication
Immunohistochemistry (IHC)	-	2 Publications

Product Specific Information

Description: This MF20 monoclonal antibody recognizes the heavy chain of myosin II, specifically the light meromyosin portion, in cardiac and skeletal muscle of vertebrates. Myosin II is composed of two heavy chains and four light chains. The 220-kDa myosin heavy chain exists as four different isoforms due to alternative splicing. Myosins interact with actin and hydrolyze ATP to function in muscle contraction, cytokinesis, and phagocytosis.

The MF20 has been shown to react to myosin from a variety of mammalian, avian and amphibian species, including rat, mouse, human, chicken, zebrafish, and dog.

Applications Reported: This MF20 antibody has been reported for use in western blotting, and immunocytochemistry.

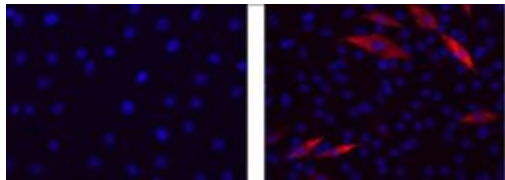
Applications Tested: This MF20 antibody has been tested by immunocytochemistry and western blot and can be used at less than or equal to 1 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For Myosin 4 Monoclonal Antibody (MF20), eBioscience™



Myosin 4 Antibody (14-6503-82) in ICC

Immunocytochemistry of differentiated C2C12 cells using 1 µg/mL of Mouse IgG2b K Isotype Control (left) or 1 µg/mL Anti-Myosin Heavy Chain Purified (right) followed by Anti-Mouse IgG TRITC. Nuclei are stained with DAPI.

[View more figures on thermofisher.com](https://www.thermofisher.com)

16 References

Western Blot (4)

Scientific reports

TAK-242, a specific inhibitor of Toll-like receptor 4 signalling, prevents endotoxemia-induced skeletal muscle wasting in mice.

"Published figure using Myosin 4 monoclonal antibody (Product # 14-6503-82) in Immunofluorescence"

Authors: Ono Y, Maejima Y, Saito M, Sakamoto K, Horita S, Shimomura K, Inoue S, Kotani J

Species
Not Applicable

Dilution
Not Cited

Year
2020

PloS one

Lipopolysaccharide inhibits myogenic differentiation of C2C12 myoblasts through the Toll-like receptor 4-nuclear factor-B signaling pathway and myoblast-derived tumor necrosis factor-.

"14-6503 was used in Western Blotting to suggest that LPS inhibits myogenic differentiation via a TLR4-NF-B-dependent pathway and an autocrine/paracrine TNF--induced pathway."

Authors: Ono Y, Sakamoto K

Species
Mouse

Dilution
1:200

Year
2017

[View more WB references on thermofisher.com](#)

Immunohistochemistry (2)

Nature communications

Genome-wide microhomologies enable precise template-free editing of biologically relevant deletion mutations.

"14-6503 was used in Immunohistochemistry to create pathogenic deletion mutations for demonstrable disease models with both gain- and loss-of-function phenotypes."

Authors: Grajcarek J, Monlong J, Nishinaka-Arai Y, Nakamura M, Nagai M, Matsuo S, Lougheed D, Sakurai H, Saito MK, Bourque G, Woltjen K

Species
Human

Dilution
1:800

Year
2019

Open biology

The requirement of Mettl3-promoted *MyoD* mRNA maintenance in proliferative myoblasts for skeletal muscle differentiation.

"14-6503 was used in Immunohistochemistry to show that Mettl3 is required for MyoD mRNA expression in proliferative myoblasts."

Authors: Kudou K, Komatsu T, Nogami J, Maehara K, Harada A, Saeki H, Oki E, Maehara Y, Ohkawa Y

Species
Mouse

Dilution
1:200

Year
2017

More applications with references on thermofisher.com

[ICC \(3\)](#) [IF \(6\)](#) [Flow \(1\)](#)

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