

# Myosin 4 Monoclonal Antibody (MF20), eFluor 660, eBioscience™

Product Details	
Size	100 µg
Species	Bovine, Dog, Chicken, Chimpanzee, Cat, Guinea pig, Human, Mouse, Non-human primate, Rabbit, Rat
Published Species	Artificial Control, Mouse, Human
Expression System	Mouse / IgG2b, kappa
Recommended Isotype Control	Mouse IgG2b kappa Isotype Control (eBMG2b), eFluor 660, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	MF20
Conjugate	eFluor® 660
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2574267

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	10 µg/mL	2 Publications
Immunofluorescence (IF)	10 µg/mL	6 Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	-
Flow Cytometry (Flow)	-	1 Publication
Western Blot (WB)	-	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 immunohistochemical staining, immunocytochemistry, and immunohistochemical staining of frozen tissue sections.

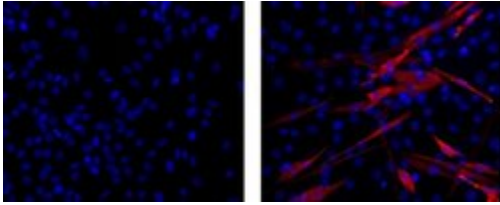
**Applications Tested:** This MF20 antibody has been tested immunocytochemistry on fixed and permeabilized C2C12 cells at less than or equal to 10 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

eFluor® 660 is a replacement for Alexa Fluor® 647. eFluor® 660 emits at 659 nm and is excited with the red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 633-647 nm; Emission: 668 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

### Product Images For Myosin 4 Monoclonal Antibody (MF20), eFluor 660, eBioscience™



#### Myosin 4 Antibody (50-6503-82) in ICC

Immunocytochemistry of fixed and permeabilized C2C12 cells using 10 µg/mL Mouse IgG2b K Isotype Control eFluor® 660 (left) or 10 µg/mL Anti-Myosin Heavy Chain eFluor® 660 (right). Nuclei are stained with DAPI.

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

## 11 References

### Immunocytochemistry (2)

#### 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 # 50-6503-82) 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

#### Journal of cellular physiology

#### Peptidyl-prolyl cis-trans isomerase NIMA interacting 1 regulates skeletal muscle fusion through structural modification of Smad3 in the linker region.

"Published figure using Myosin 4 monoclonal antibody (Product # 50-6503-82) in Immunocytochemistry"

Authors: Islam R, Yoon H, Shin HR, Bae HS, Kim BS, Yoon WJ, Woo KM, Baek JH, Lee YS, Ryoo HM

**Species**  
Artificial Control

**Dilution**  
Not Cited

**Year**  
2018

### Immunofluorescence (6)

#### 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 # 50-6503-82) in Immunofluorescence"

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

**Species**  
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**Dilution**  
Not Cited

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Authors: Islam R, Yoon H, Shin HR, Bae HS, Kim BS, Yoon WJ, Woo KM, Baek JH, Lee YS, Ryoo HM

**Species**  
Artificial Control

**Dilution**  
Not Cited

**Year**  
2018

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**WB (2)**   **Flow (1)**

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