

Mu-Calpain Monoclonal Antibody (9A4H8D3)

Product Details	
Size	100 µg
Species Reactivity	Bovine, Hamster, Human, Mouse, Pig, Rabbit, Rat
Published Species	Yeast, Rabbit, Pig, Rat, Bovine, Sheep, Arthropod, Hamster, Fish, Mouse, Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	9A4H8D3
Conjugate	Unconjugated
Immunogen	Purified bovine skeletal muscle 80 kDa mu-calpain subunit.
Form	Liquid
Concentration	1.0 mg/mL
Purification	Protein A
Storage buffer	PBS with 1mg/mL BSA
Contains	0.05% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2069338

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	Assay dependent	2 Publications
Immunofluorescence (IF)	Assay dependent	-
Immunohistochemistry (Frozen) (IHC (F))	Assay dependent	-
Immunohistochemistry (Paraffin) (IHC (P))	Assay-Dependent	-
Western Blot (WB)	2 µg/mL	36 Publications
Immunohistochemistry (IHC)	-	2 Publications

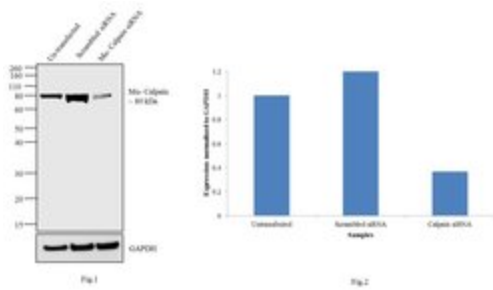
Product Specific Information

MA3-940 detects mu-calpain from human platelets and erythrocytes, bovine platelets, heart and skeletal muscle, rat myoblasts, kidney, liver and spleen, mouse lung, pig cultured cells and hamster and rabbit samples. This antibody does not cross-react with m-calpain, n-calpain, calmodulin or calpastatin.

MA3-940 has been successfully used in Western blot, immunofluorescence, immunohistochemistry, and immunocytochemistry procedures. By Western blot, this antibody detects an 80 kDa protein representing mu-calpain from human platelets and erythrocytes and HeLa and A431 cell lysates. Immunocytochemical staining of mu-calpain in LLC-PK1 cells with MA3-940 results in diffuse cytoplasmic staining. This product has not been shown to be effective in immunoprecipitation experiments.

The MA3-940 antigen is purified bovine skeletal muscle 80 kDa mu-calpain subunit. This antibody recognizes an epitope between amino acids 465-520 (domain III) of human mu-calpain.

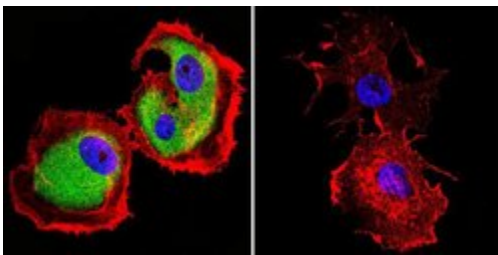
Advanced Verification Data



Mu-Calpain Antibody (MA3-940)

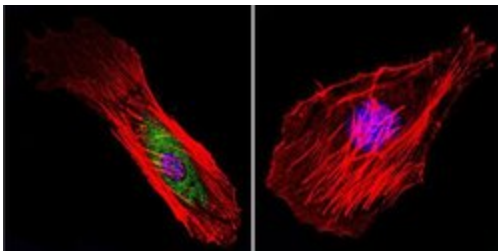
Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. HeLa cells were transfected with Mu-Calpain siRNA and loss of signal was observed in Western Blot using Anti-Mu-Calpain Monoclonal Antibody (Product # MA3-940). Knockdown validation info.

Product Images For Mu-Calpain Monoclonal Antibody (9A4H8D3)



Mu-Calpain Antibody (MA3-940) in IF

Immunofluorescent analysis of Mu-Calpain in MCF-7 Cells. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with a Mu-Calpain monoclonal antibody (Product # MA3-940) at a dilution of 1:20 overnight at 4 C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35503). Mu-Calpain staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Images were taken at 60X magnification. This image was taken using unpurified ascites antibody.



Mu-Calpain Antibody (MA3-940) in IF

Immunofluorescent analysis of Mu-Calpain in HeLa Cells. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with a Mu-Calpain monoclonal antibody (Product # MA3-940) at a dilution of 1:100 overnight at 4 C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35503). Mu-Calpain staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Images were taken at 60X magnification. This image was taken using unpurified ascites antibody.

[View more figures on thermofisher.com](#)

40 References

Western Blot (36)

Journal of animal science

Effect of pH and ionic strength on mu- and m-calpain inhibition by calpastatin.

"MA3-940 was used in western blot to study the effect of pH and ionic strength on mu- and m-calpain activity and the ability of calpastatin to inhibit the activity of mu- or m-calpain"

Authors: Maddock KR, Huff-Lonergan E, Rowe LJ, Lonergan SM

Species
Pig

Dilution
Not Cited

Year
2005

Changes in the calpains and calpastatin during postmortem storage of bovine muscle.

"MA3-940 was used in western blot to detect the changes of micro-calpain, m-calpain, and calpastatin in bovine muscle during postmortem storage"

Authors: Boehm ML,Kendall TL,Thompson VF,Goll DE

Species
Bovine

Dilution
1:10

Year
1998

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

Immunohistochemistry (2)

American journal of physiology. Cell physiology

Fiber type-specific expression of major proteolytic systems in fast- to slow-transforming rabbit muscle.

"MA3-940 was used in immunohistochemistry to study the importance of two major proteolytic systems in transforming rabbit and rat muscles"

Authors: Sultan KR,Dittrich BT,Leisner E,Paul N,Pette D

Species
Rabbit

Dilution
Not Cited

Year
2001

Journal of animal science

Early postmortem biochemical factors influence tenderness and water-holding capacity of three porcine muscles.

"MA3-940 was used in immunohistochemistry to investigate the effect of early postmortem biochemical factors on tenderness and water-holding capacity of three porcine muscles"

Authors: Melody JL,Lonergan SM,Rowe LJ,Huiatt TW,Mayes MS,Huff-Lonergan E

Species
Pig

Dilution
1:100

Year
2004

More applications with references on thermofisher.com

ICC (2)

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