

# Calsequestrin Monoclonal Antibody (VIID12)

Product Details	
Size	100 µL
Species Reactivity	Dog, Chicken, Human, Mouse, Pig, Rabbit, Rat
Published Species	Dog, Rabbit, Rat, Pig, Non-human primate, Rodent, Mouse, Human, Chicken
Host/Isotype	Mouse / IgG2b
Class	Monoclonal
Type	Antibody
Clone	VIID12
Conjugate	Unconjugated
Immunogen	Purified rabbit skeletal muscle sarcoplasmic reticulum.
Form	Liquid
Concentration	Conc. Not Determined
Storage buffer	ascites diluted in PBS
Contains	0.05% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_325496

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	1:50-1:500	2 Publications
Immunofluorescence (IF)	1:50-1:500	3 Publications
Immunohistochemistry (IHC)	1:20	4 Publications
Western Blot (WB)	1:1,000	51 Publications
Immunoprecipitation (IP)	-	1 Publication

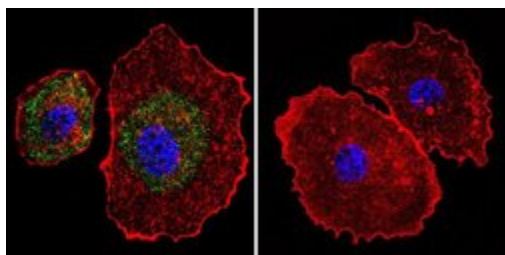
## Product Specific Information

MA3-913 detects calsequestrin from human, mouse, rat, canine, porcine, chicken, and rabbit skeletal muscle tissues. This antibody recognizes calsequestrin in both type I (slow) and type II (fast) skeletal muscle tissues.

MA3-913 has been successfully used in Western blot procedures. By Western blot, this antibody detects a 63 kDa protein representing calsequestrin from canine skeletal muscle extracts. Higher molecular weight proteins are seen on the Western blot and are believed to be calsequestrin-like proteins found in the sarcoplasmic reticulum. The staining pattern yields double rows of fluorescent dots corresponding to triad pairs on either side of the Z-line.

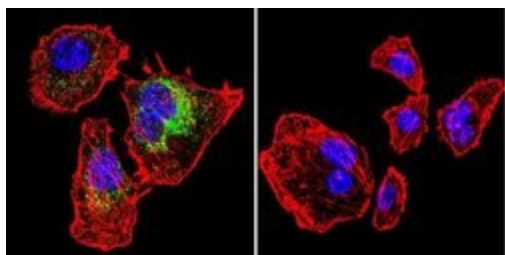
The MA3-913 antigen is purified rabbit skeletal muscle sarcoplasmic reticulum.

## Product Images For Calsequestrin Monoclonal Antibody (VIII12)



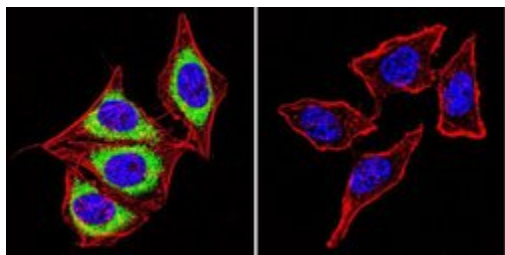
### Calsequestrin Antibody (MA3-913) in IF

Immunofluorescent analysis of Calsequestrin using Anti-Calsequestrin Monoclonal Antibody (VIII12) (Product # MA3-913) shows staining in MCF-7 Cells. Calsequestrin staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing Calsequestrin (Product # MA3-913) at a dilution of 1:100 over night at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35503, Goat Anti-Mouse). Images were taken at 60X magnification.



### Calsequestrin Antibody (MA3-913) in IF

Immunofluorescent analysis of Calsequestrin using Anti-Calsequestrin Monoclonal Antibody (VIII12) (Product # MA3-913) shows staining in U251 Cells. Calsequestrin staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing Calsequestrin (Product # MA3-913) at a dilution of 1:100 over night at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35503, Goat Anti-Mouse). Images were taken at 60X magnification.



### Calsequestrin Antibody (MA3-913) in IF

Immunofluorescent analysis of Calsequestrin using Anti-Calsequestrin Monoclonal Antibody (VIII12) (Product # MA3-913) shows staining in HeLa Cells. Calsequestrin staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing Calsequestrin (Product # MA3-913) at a dilution of 1:100 over night at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35503, Goat Anti-Mouse). Images were taken at 60X magnification.

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## 61 References

### Western Blot (51)

The Journal of physiology

#### Exogenous Ca<sup>2+</sup>-ATPase isoform effects on Ca<sup>2+</sup> transients of embryonic chicken and neonatal rat cardiac myocytes.

"Published figure using Calsequestrin monoclonal antibody (Product # MA3-913) in Western Blot"

Authors: Cavagna M,O'Donnell JM,Sumbilla C,Inesi G,Klein MG

**Species**  
Chicken  
Not Applicable

**Dilution**  
Not Cited  
Not Cited

**Year**  
2000

The Journal of biological chemistry

#### Ablation of skeletal muscle triadin impairs FKBP12/RyR1 channel interactions essential for maintaining resting cytoplasmic Ca<sup>2+</sup>.

"MA3-913 was used in western blot to investigate the importance of triadins in the regulation of resting cytoplasmic calcium"

Authors: Eltit JM,Feng W,Lopez JR,Padilla IT,Pessah IN,Molinski TF,Fruen BR,Allen PD,Perez CF

**Species**  
Mouse  
Not Applicable

**Dilution**  
Not Cited  
Not Cited

**Year**  
2010

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

### Immunohistochemistry (4)

Human mutation

#### A mutation in the CASQ1 gene causes a vacuolar myopathy with accumulation of sarcoplasmic reticulum protein aggregates.

"MA3-913 was used in immunohistochemistry to study a missense mutation in the calsequestrin-1 gene discovered in a group of patients with a myopathy"

Authors: Rossi D,Vezzani B,Galli L,Paolini C,Toniolo L,Pierantozzi E,Spinozzi S,Barone V,Pegoraro E,Bello L,Cenacchi G,Vattemi G,Tomelleri G,Ricci G,Siciliano G,Protasi F,Reggiani C,Sorrentino V

**Species**  
Mouse  
Non-human primate  
Not Applicable

**Dilution**  
1:300  
Not Cited  
Not Cited

**Year**  
2014

Journal of the Royal Society, Interface

#### Observation of the molecular organization of calcium release sites in fast- and slow-twitch skeletal muscle with nanoscale imaging.

"Published figure using Calsequestrin monoclonal antibody (Product # MA3-913) in Immunofluorescence"

Authors: Jayasinghe ID,Munro M,Baddeley D,Launikonis BS,Soeller C

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2014

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

### More applications with references on thermofisher.com

ICC (2) IF (3) IP (1)

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