

Sodium/Calcium Exchanger Monoclonal Antibody (C2C12)

Product Details	
Size	100 µg
Species Reactivity	Dog, Guinea pig, Human, Mouse, Rabbit, Rat
Published Species	Dog, Rabbit, Rat, Pig, Rodent, Marsupial, Bovine, Human, Mouse, Guinea pig
Host/Isotype	Mouse / IgM
Class	Monoclonal
Type	Antibody
Clone	C2C12
Conjugate	Unconjugated
Immunogen	Purified canine cardiac sodium/calcium exchanger.
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography - MBP
Storage buffer	PBS with 1mg/mL BSA
Contains	0.05% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2191111

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	65 Publications
Immunohistochemistry (IHC)	-	5 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1/100	-
Immunohistochemistry (Frozen) (IHC (F))	Assay-dependent	-
Immunocytochemistry (ICC/IF)	1:200	10 Publications
Immunoprecipitation (IP)	Assay-dependent	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

MA3-926 detects sodium/calcium exchanger from human, canine, rabbit, mouse, guinea pig and rat kidney and cardiac tissues.

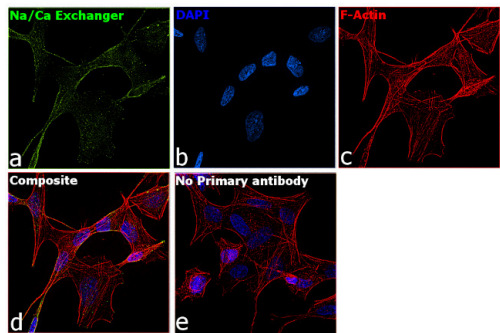
MA3-926 has been successfully used in Western blot, immunofluorescence, immunohistochemistry, and immunoprecipitation procedures. By Western blot, this antibody detects a 120 kDa protein representing the sodium/calcium exchanger from guinea pig cardiac extract. The bands seen at 70 kDa and 160 kDa represent a proteolytic fragment and non-reduced exchanger respectively. MA3-926 is not recommended for Western blot procedures of rat tissues. Immunohistochemical staining of the sodium/calcium exchanger in rat heart with MA3-926 results in staining of the plasma membrane and intense staining of cardiac T-tubular membrane.

The MA3-926 antigen is purified canine cardiac sodium/calcium exchanger. This antibody recognizes an epitope between amino acids 371-525, which is on the intracellular side of the plasma membrane.

Product Images For Sodium/Calcium Exchanger Monoclonal Antibody (C2C12)

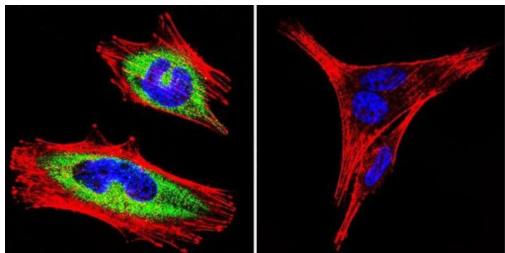
Sodium/Calcium Exchanger Antibody (MA3-926) in ICC/IF

Immunofluorescence analysis of Sodium/Calcium Exchanger was performed using 70% confluent log phase SH-SY5Y cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with Sodium/Calcium Exchanger Monoclonal Antibody (C2C12) (Product # MA3-926) at 1:200 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32723), (1:2000 dilution), for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b:Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing predominantly plasma membrane localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60x magnification.



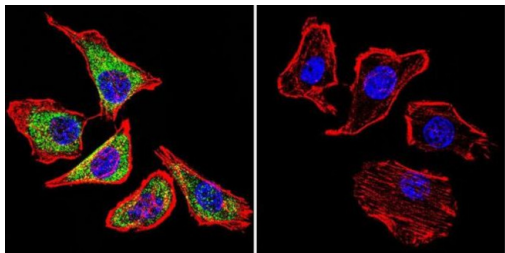
Sodium/Calcium Exchanger Antibody (MA3-926) in ICC/IF

Immunofluorescent analysis of Sodium/Calcium Exchanger using Anti-Sodium /Calcium Exchanger Monoclonal Antibody (C2C12) (Product # MA3-926) shows staining in A2058 Cells. Sodium/Calcium Exchanger 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 Sodium/Calcium Exchanger (Product # MA3-926) 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.



Sodium/Calcium Exchanger Antibody (MA3-926) in ICC/IF

Immunofluorescent analysis of Sodium/Calcium Exchanger using Anti-Sodium /Calcium Exchanger Monoclonal Antibody (C2C12) (Product # MA3-926) shows staining in U251 Cells. Sodium/Calcium Exchanger 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 Sodium/Calcium Exchanger (Product # MA3-926) 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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Western Blot (65)

<p>Clinical science (London, England : 1979)</p> <p>Increased 1-adrenergic receptor antibody confers a vulnerable substrate for atrial fibrillation via mediating Ca2+ mishandling and atrial fibrosis in active immunization rabbit models.</p> <p>"Published figure using Sodium/Calcium Exchanger monoclonal antibody (Product # MA3-926) in Western Blot"</p> <p>Authors: Sun H,Song J,Li K,Li Y,Shang L,Zhou Q,Lu Y,Zong Y,He X,Kari M,Yang H,Zhou X,Zhang L,Tang B</p>	<p>Year 2023</p>
<p>Cardiovascular diabetology</p> <p>Dapagliflozin reduces the vulnerability of rats with pulmonary arterial hypertension-induced right heart failure to ventricular arrhythmia by restoring calcium handling.</p> <p>"MA3-926 was used in Western Blotting to examine the effects of DAPA on VA vulnerability in a rat model of PAH-induced RHF."</p> <p>Authors: Wu J,Liu T,Shi S,Fan Z,Hiram R,Xiong F,Cui B,Su X,Chang R,Zhang W,Yan M,Tang Y,Huang H,Wu G,Huang C</p>	<p>Year 2022</p> <p>Species Rat</p> <p>Dilution 1:500</p>

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Immunohistochemistry (5)

<p>Journal of cell science</p> <p>Evidence for a regulated Ca²⁺ entry in proximal tubular cells and its implication in calcium stone formation.</p> <p>"MA3-926 was used in Immunohistochemistry to show the existence of a regulated transcellular Ca2+ entry pathway in luminal membrane proximal tubule cells induced by Ca2+ sensing receptor-mediated activation of transient receptor potential canonical 3 channels."</p> <p>Authors: Ibeh CL,Yiu AJ,Kanaras YL,Paal E,Birnbaumer L,Jose PA,Bandyopadhyay BC</p>	<p>Year 2019</p> <p>Species Mouse</p>
<p>PloS one</p> <p>Generation and characterization of functional cardiomyocytes derived from human T cell-derived induced pluripotent stem cells.</p> <p>Authors: Seki T,Yuasa S,Kusumoto D,Kunitomi A,Saito Y,Tohyama S,Yae K,Kishino Y,Okada M,Hashimoto H,Takei M,Egashira T,Kodaira M,Kuroda Y,Tanaka A,Okata S,Suzuki T,Murata M,Fujita J,Fukuda K</p>	<p>Year 2014</p> <p>Species Human</p>

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More applications with references on thermofisher.com

- ICC/IF (10)
- IP (1)
- Misc (1)

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