Ryanodine Receptor Monoclonal Antibody (C3-33)

Product Details	
Size	100 µg
Species Reactivity	Amphibian, Dog, Chicken, Fish, Guinea pig, Human, Mouse, Rabbit, Rat
Published Species	Dog, Rabbit, Rat, Pig, Sheep, Human, Mouse
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	C3-33
Conjugate	Unconjugated
Immunogen	Canine cardiac ryanodine receptor (RyR2)
Form	Liquid
Concentration	1 mg/mL
Purification	Protein G
Storage buffer	PBS
Contains	0.05% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2183054

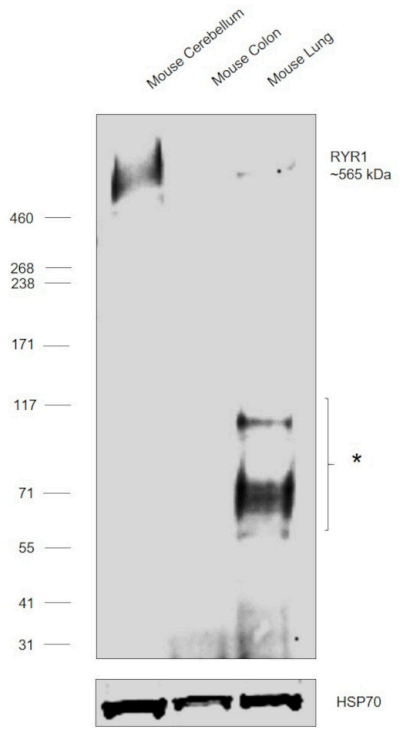
Applications	Tested Dilution	Publications
Western Blot (WB)	1 µg/mL	97 Publications
Immunohistochemistry (IHC)	-	23 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1 µg/mL	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	1 µg/mL	3 Publications
Immunocytochemistry (ICC/IF)	1:50	36 Publications
Flow Cytometry (Flow)	Assay-dependent	-
Immunoprecipitation (IP)	Assay-dependent	7 Publications
ChIP assay (ChIP)	-	1 Publication
in situ PLA (PLA)	-	1 Publication
Dot blot (DB)	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

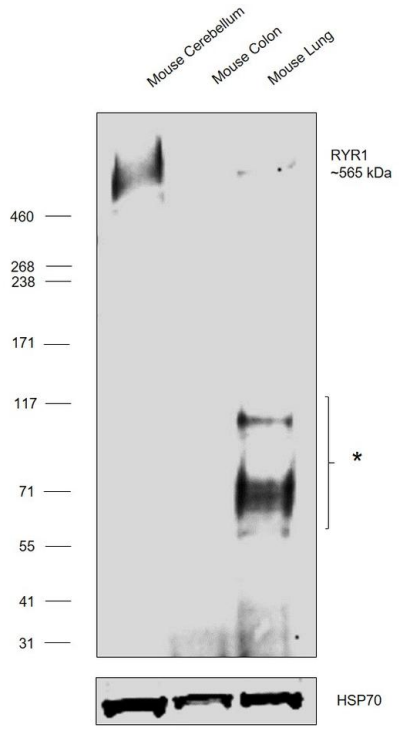
MA3-916 detects ryanodine receptor 2 (RyR2) and shows cross-reactivity with RyR1 in amphibian, canine, chicken, fish, guinea pig and rat tissues.

MA3-916 has been successfully used in Western blot, immunohistochemical, immunofluorescence, immunocytochemistry and immunoprecipitation procedures. By Western blot, this antibody detects a 565 kDa protein representing the ryanodine receptor. In non-mammalian vertebrates, a doublet is seen at 565 kDa representing the alpha and beta isoforms of the receptor. Immunohistochemical staining of RyR in rat cardiac tissue with MA3-916 results in intense staining of the myofiber, which is consistent with sarcoplasmic reticulum localization.

Product Images For Ryanodine Receptor Monoclonal Antibody (C3-33)

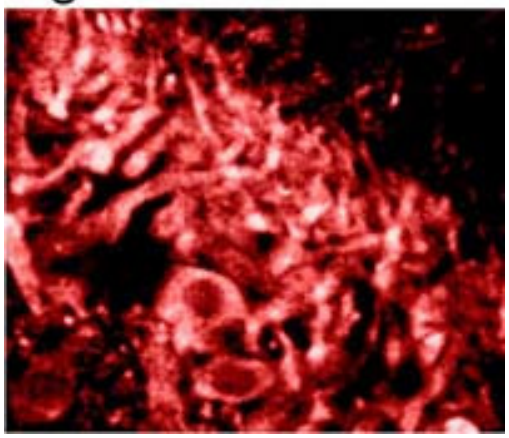


Ryanodine Receptor Antibody (MA3-916)
Antibody specificity was demonstrated by detection of differential basal expression of the target across tissues tested owing to their inherent genetic constitution. Relative expression of Ryanodine receptor 1 was observed in Mouse Cerebellum in comparison to Mouse colon and Mouse lung using Anti-Ryanodine Receptor Monoclonal Antibody (C3-33) (Product # MA3-916) in Western Blot. {RE}



Ryanodine Receptor Antibody (MA3-916) in WB
Western blot was performed using Anti-Ryanodine Receptor Monoclonal Antibody (C3-33) (Product # MA3-916) and a 565 kDa band corresponding to Ryanodine receptor 1 was observed along with two uncharacterized band (*) at ~70 kDa and 100 kDa across tissues tested. Tissue extracts (30 µg lysate) of Mouse Cerebellum (Lane 1), Mouse Colon (Lane 2) and Mouse Lung (Lane 3) were electrophoresed using NuPAGE™ 3-8% Tris-Acetate Protein Gel (Product # EA0378BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # LC2001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1 µg/mL) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using SuperSignal™ West Dura Extended Duration Substrate (Product # 34076).

Fig. 1



Ryanodine Receptor Antibody (MA3-916) in IHC
Immunofluorescent analysis of rat brain hippocampus tissue shows that Ryanodine Receptor Monoclonal Antibody (Product # MA3-916) crossreacts with RyR1.

171 References

Western Blot (97)

International journal of cardiology. Heart & vasculature

Anti-inflammatory effects of endothelin receptor blockade in left atrial tissue of spontaneously hypertensive rats.

"MA3-916 was used in Western Blotting to investigate whether an endothelin receptor antagonist, macitentan, could reduce left atrial (LA) remodeling in arterial hypertension."

Authors: Bukowska A,Nikonova Y,Wolke C,Lendeckel U,Kockskämper J,Goette A

Year 2022

Species Rat

Dilution 1:5000

Journal of the American Heart Association

Candesartan Cilexetil Attenuates Arrhythmogenicity Following Pressure Overload in Rats via the Modulation of Cardiac Electrical and Structural Remodeling and Calcium Handling Dysfunction.

"MA3-916 was used in Western Blotting to assess whether candesartan cilexetil, an angiotensin II type 1 receptor blocker, could suppress arrhythmogenecity by attenuating cardiac electrical remodeling and calcium mishandling in rats with pressure-overload hypertrophy."

Authors: Chang GJ,Yeh YH,Chen WJ,Ko YS,Lai YJ,Lee YS

Year 2022

Species Rat

Dilution 1:1000

View more WB references on thermofisher.com

Immunohistochemistry (23)

Cancer management and research

Identification of Three Potential Prognostic Genes in Platinum-Resistant Ovarian Cancer via Integrated Bioinformatics Analysis.

"MA3-916 was used in Immunohistochemistry, Western Blot to find the poorly understood molecular mechanisms underlying platinum resistance in ovarian cancer."

Authors: Zhang X,Wei X,Bai G,Huang X,Hu S,Mao H,Liu P

Year 2022

Species Human

Dilution 1:1000

Nature communications

Repeat DNA-PAINT suppresses background and non-specific signals in optical nanoscopy.

"MA3-916 was used in Immunohistochemistry to describe Repeat DNA-PAINT, a method that enables a substantial reduction in imager concentration, thus suppressing spurious signals."

Authors: Clowsley AH,Kaufhold WT,Lutz T,Meletiou A,Di Michele L,Soeller C

Year 2021

Species Human

Dilution 1:200

View more IHC references on thermofisher.com

More applications with references on thermofisher.com

IHC (P) (1) IHC (F) (3) ICC/IF (36) IP (7) ChIP (1) PLA (1) DB (1) Misc (1)

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