

# Product Datasheet

## Ryanodine Receptor Antibody (34C) - BSA Free NB300-543

Unit Size: 100 uL

Store at -20C. Avoid freeze-thaw cycles.

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**NB300-543****Ryanodine Receptor Antibody (34C) - BSA Free**

<b>Product Information</b>	
<b>Unit Size</b>	100 uL
<b>Concentration</b>	1 mg/ml
<b>Storage</b>	Store at -20C. Avoid freeze-thaw cycles.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	34C
<b>Preservative</b>	0.05% Sodium Azide
<b>Isotype</b>	IgG1
<b>Purity</b>	Protein A purified
<b>Buffer</b>	PBS
<b>Target Molecular Weight</b>	565 kDa

<b>Product Description</b>	
<b>Description</b>	Novus Biologicals Mouse Ryanodine Receptor Antibody (34C) - BSA Free (NB300-543) is a monoclonal antibody validated for use in IHC, WB, ICC/IF and IP. Anti-Ryanodine Receptor Antibody: Cited in 11 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Mouse
<b>Gene ID</b>	6261
<b>Gene Symbol</b>	RYR1
<b>Species</b>	Human, Mouse, Rat, Amphibian, Bovine, Canine, Fish, Ferret, Mink, Primate, Rabbit, Sheep
<b>Reactivity Notes</b>	Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Additional Mouse on Mouse blocking steps may be required for IHC and ICC experiments. Please contact Technical Support for more information.
<b>Specificity/Sensitivity</b>	This antibody detects ryanodine receptor Ryanodine Receptor-1 and Ryanodine Receptor-2 isoforms in amphibian, chicken, bovine, canine, fish, human, non-human primate, mouse, rabbit, mink, rat and sheep tissues. In chicken, it detects the alpha, beta and cardiac isoforms. This antibody also detects Ryanodine Receptor-3 in mouse cells. In frog, it detects the alpha and beta isoforms and in fish it detects the alpha isoform.
<b>Immunogen</b>	Partially purified chicken pectoral muscle ryanodine receptor.

<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunoprecipitation, Block/Neutralize
<b>Recommended Dilutions</b>	Western Blot 1:5000, Immunohistochemistry 1:10 - 1:500, Immunocytochemistry/Immunofluorescence, Immunoprecipitation 1:10 - 1:500, Immunohistochemistry-Paraffin 1:10 - 1:500, Immunohistochemistry-Frozen 1:1000, Block/Neutralize

**Application Notes**

May be useful in IF, IHC-Fr, IP, and WB. WB: Detects an approx. 565 kDa protein representing RyR from rat skeletal muscle extracts. In non-mammalian vertebrates, a doublet is seen at 565 kDa representing the alpha and beta isoforms of the receptor. IHC: Staining of RyR in chicken brain results in intense staining of cerebral Purkinje neurons. Use in Immunocytochemistry/immunofluorescence reported in scientific literature (PMID: 15564379).

**Images**

Immunohistochemistry-Paraffin: Ryanodine Receptor Antibody (34C) [NB300-543] - Biopsies of deparaffinized Human skeletal muscle tissue.

**Publications**

Liu Z et al. Three-dimensional reconstruction of the recombinant type 3 ryanodine receptor localization of its amino terminus. *Proc Natl Acad Sci U S A* 98:6104-9. 2001-01-01 [PMID: 11353864]

Yamada KA et al. Long-chain acylcarnitine induces Ca<sup>2+</sup> efflux from the sarcoplasmic reticulum. *J Cardiovasc Pharmacol* 36:14-21. 2000-01-01 [PMID: 10892655]

Chan SL et al. Presenilin-1 mutations increase levels of ryanodine receptors calcium release in PC12 cells cortical neurons. *J Biol Chem* 275:18195-200. 2000-01-01 [PMID: 10764737]

Moore RA et al. A transgenic myogenic cell line lacking ryanodine receptor protein for homologous expression studies: reconstitution of Ry1R protein function. *J Cell Biol* 140:843-51. 1998-01-01 [PMID: 9472036]

Protasi F et al. Role of ryanodine receptors in the assembly of calcium release units in skeletal muscle. *J Cell Biol* 140:831-42. 1998-01-01 [PMID: 9472035]

Chen SR et al. Positioning of major tryptic fragments in the Ca<sup>2+</sup> release channel (ryanodine receptor) resulting from partial digestion of rabbit skeletal muscle sarcoplasmic reticulum. *J Biol Chem* 268:22642-9. 1993-01-01 [PMID: 8226772]

Airey JA et al. Three ryanodine receptor isoforms exist in avian striated muscles. *Biochemistry* 32:5739-45. 1993-01-01 [PMID: 7684927]

Airey JA et al. Identification localization of two triad junctional foot protein isoforms in mature avian fast twitch skeletal muscle. *J Biol Chem* 265:14187-94. 1990-01-01 [PMID: 2387846]

Walton PD et al. Ryanodine inositol trisphosphate receptors coexist in avian cerebellar Purkinje neurons. *J Cell Biol* 113:1145-57. 1991-01-01 [PMID: 1645737]

Naukkarinen A. Myotonic dystrophy type 2 (DM2): Diagnostic methods and molecular pathology . 2011; University of Helsinki, Finland.

Jordan T et al. Inhibition of ryanodine receptor 1 in fast skeletal muscle fibers induces a fast-to-slow muscle fiber type transition. *J Cell Sci*; 117(Pt 25):6175-83. 2004-12-01 [PMID: 15564379] (ICC/IF)

Liu G et al. Molecular interaction between ryanodine receptor and glycoprotein triadin involves redox cycling of functionally important hyperreactive sulfhydryls. *J Biol Chem* 269 (52):33028-34. 1994-12-30 [PMID: 7806531] (B/N)



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### **Products Related to NB300-543**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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