

Product Datasheet

ITPR2 Antibody NB100-2466

Unit Size: 0.1 mg

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

www.novusbio.com



technical@novusbio.com

Reviews: 1 **Publications: 7**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NB100-2466

Updated 10/23/2024 v.20.1

**Earn rewards for product
reviews and publications.**

Submit a publication at www.novusbio.com/publications

Submit a review at www.novusbio.com/reviews/destination/NB100-2466



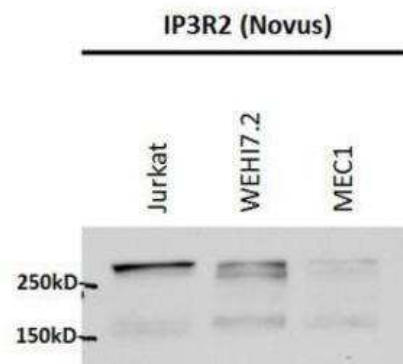
NB100-2466

ITPR2 Antibody

Product Information	
Unit Size	0.1 mg
Concentration	0.5 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	Tris saline (20 mM Tris pH 7.3, 150 mM NaCl), 0.5% BSA
Product Description	
Host	Goat
Gene ID	3709
Gene Symbol	ITPR2
Species	Human, Mouse, Rat
Reactivity Notes	Rat reactivity reported in scientific literature (PMID: 25921245). Mouse reactivity reported scientific literature (PMID: 20814235). Predicted cross-reactivity based on sequence identity: Canine, Bovine.
Specificity/Sensitivity	No cross-reactivity expected with other types of ITPR.
Immunogen	Peptide with sequence C-PIEESNILSPVQD corresponding to internal region according to NP_002214.2.
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Peptide ELISA
Recommended Dilutions	Western Blot 1:5000, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 3.75 ug/ml, Peptide ELISA Detection limit 1:128000
Application Notes	WB: Preliminary experiments gave an approx. 28-30 kDa band in human heart lysates after 0.1 ug/ml antibody staining. Please note that currently we cannot find an explanation in the literature for the band we observe given the calculated size of 308 kDa band according to NP_002214.2. The 28-30 kDa band was successfully blocked by incubation with the immunizing peptide. IHC: Paraffin embedded Human Kidney, Skin and Heart. Use in Immunocytochemistry/immunofluorescence reported in multiple pieces of scientific literature.

Images

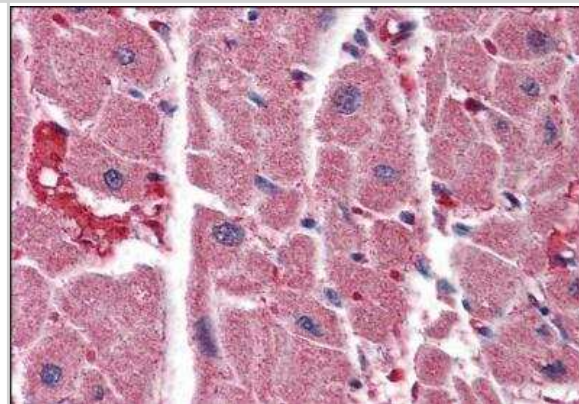
Western Blot: ITPR2 Antibody [NB100-2466] - 2 sec exposure using NB100-2466 on 80 ug total cell lysates listed above. Primary antibody applied at 1:500 overnight at 4degC, secondary donkey anti-goat applied for 2 hours at room temperature at 1:5000. (Data provided by Karen McColl at Case Western Reserve University)



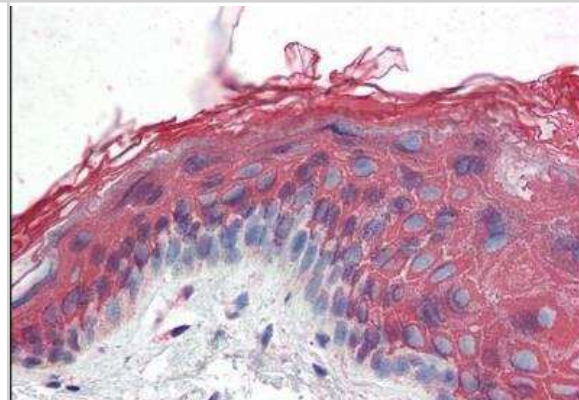
Immunohistochemistry-Paraffin: ITPR2 Antibody [NB100-2466] - (3.75ug/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



Immunohistochemistry-Paraffin: ITPR2 Antibody [NB100-2466] - (3.75ug/ml) staining of paraffin embedded Human Heart. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



Immunohistochemistry-Paraffin: ITPR2 Antibody [NB100-2466] - (3.75ug/ml) staining of paraffin embedded Human Skin. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



Publications

Kaufman AM Non-canonical members of circuits: A role for the locus coeruleus in reward related place field plasticity, and investigating differences in astrocyte calcium signaling between hippocampal layers Thesis 2020-01-01 (ICC/IF, Mouse)

Olivares-Florez S, Czolbe M, Riediger F et al. Nuclear calcineurin is a sensor for detecting Ca²⁺ release from the nuclear envelope via IP3R. *J. Mol. Med.* 2018-11-01 [PMID: 30293136] (ICC/IF, Mouse)

Liu F, Li Zf, Wang Zy, Wang L. Role of subcellular calcium redistribution in regulating apoptosis and autophagy in cadmium-exposed primary rat proximal tubular cells. *J. Inorg. Biochem.* 2016-09-14 [PMID: 27665314] (WB)

Futatsugi A, Nakamura T, Yamada MK et al. IP3 receptor types 2 and 3 mediate exocrine secretion underlying energy metabolism. *Science* 2005-09-30 [PMID: 16195467]

Wang H, Wang ZK, Jiao P et al. Redistribution of subcellular calcium and its effect on apoptosis in primary cultures of rat proximal tubular cells exposed to lead *Toxicology* 2015-04-25 [PMID: 25921245] (WB, Rat)

Ljubojevic S, Radulovic S, Leitinger G et al. Early Remodelling of Perinuclear Ca²⁺ Stores and Nucleoplasmic Ca²⁺ Signalling During the Development of Hypertrophy and Heart Failure. *Circulation.* 2014-06-13 [PMID: 24928680] (ICC/IF, WB, Mouse, Human)

Details:

In this study involving hypertrophy and heart failure models, goat polyclonal anti-IP3R2 antibody from Novus Biologicals (ITPR2 antibody, NB100-2466) was used for ICC-IF immunostaining of Human and Mouse cardiomyocytes isolated from nonfailing and failing hearts (Figure 2 B). Antibody also used for WB in human heart homogenate (Figure S5C) and for immunogold labeling/transmission immuno-electron microscopy in mouse hearts (Figure 2 D).

Harr MW, McColl KS, Zhong F et al. Glucocorticoids downregulate Fyn and inhibit IP(3)-mediated calcium signaling to promote autophagy in T lymphocytes *Autophagy* 2010-10-01 [PMID: 20814235] (WB, Mouse)





Novus Biologicals USA

10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada

21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd

19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information

www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Products Related to NB100-2466

NB100-2466PEP	ITPR2 Antibody Blocking Peptide
HAF017	Rabbit anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
HAF109	Donkey anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
NB410-28088-1mg	Goat IgG Isotype Control

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.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NB100-2466

Earn gift cards/discounts by submitting a publication using this product:
www.novusbio.com/publications



