

Product Datasheet

TRPM2 Antibody NB110-81601SS

Unit Size: 0.025 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Publications: 5

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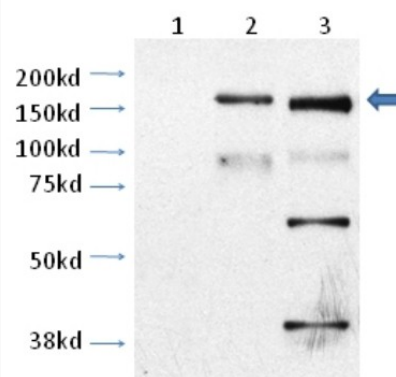
NB110-81601SS

TRPM2 Antibody

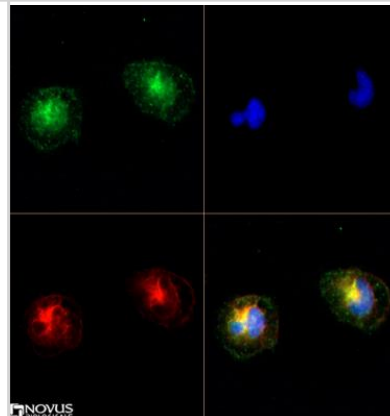
Product Information	
Unit Size	0.025 ml
Concentration	0.90 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.1% Sodium Azide
Purity	Immunogen affinity purified
Buffer	PBS, 30% glycerol
Target Molecular Weight	181 kDa
Product Description	
Host	Rabbit
Gene ID	7226
Gene Symbol	TRPM2
Species	Mouse, Rat
Species Reactivity	Mouse and rat.
Specificity/Sensitivity	This is specific for isoform 1, or the long isoform (TRPM2-L), of TRPM2.
Immunogen	Synthetic peptide made to a C-terminal portion of the rat TRPM2 protein (within residues 1430-1508). [Swiss-Prot# Q5G856]
Product Application Details	
Applications	Western Blot, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen
Recommended Dilutions	Immunocytochemistry/Immunofluorescence 1:10-1:500, Immunohistochemistry 1:200, Immunohistochemistry-Frozen, Western Blot 1:500-1:1000
Application Notes	This TRPM2 antibody is useful for Immunocytochemistry/Immunofluorescence, Immunohistochemistry and Western blot, where a band is seen at ~181 kDa.

Images

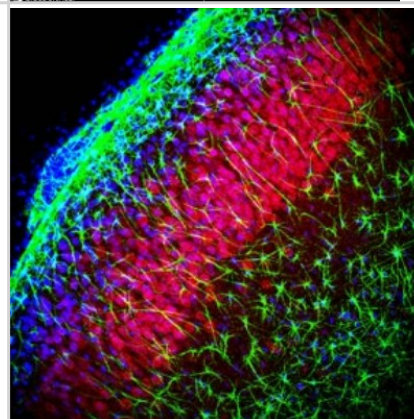
Western Blot: TRPM2 Antibody [NB110-81601] - Lane 1: CHO cells untransfected. Lane 2: CHO cell transfected with rat TRPM2 Lane 3: Mouse cortical neurons (cultured) Photo courtesy of Dr. Paco Herson, Oregon Health & Science University.



Immunocytochemistry/Immunofluorescence: TRPM2 Antibody [NB110-81601] - TRPM2 antibody was tested in Neuro2A cells with DyLight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).



Immunocytochemistry/Immunofluorescence: TRPM2 Antibody [NB110-81601] - Staining of rat hippocampus using NB110-81601. TRPM2 is stained red, GFAP is stained green and nuclei staining is blue. Photo courtesy of Dr. Ji-Zhong Bai, The University of Auckland, New Zealand.



Publications

Lu S, Xiang L, Clemmer JS et al. Oxidative stress increases pulmonary vascular permeability in diabetic rats through activation of transient receptor potential melastatin 2 (TRPM2) channels. *Microcirculation* 2014 Jul 24 [PMID: 25059284] (WB, Rat)

Details:
TRPM2 antibody used for WB on tissue lysate of pulmonary arteries from control male lean Zucker/LZ Rats and hyperglycemic LZ rats (streptozotocin/STZ 50mg/kg -induced type I diabetic model). Figure 1 shows the down-regulation of TRPM2-L channel in STZ-treated type I diabetic LZ.

Roberge S, Roussel J, Andersson DC et al. TNF-alpha-mediated caspase-8 activation induces ROS production and TRPM2 activation in adult ventricular myocytes. *Cardiovasc. Res.* 2014 May 06 [PMID: 24802330] (WB, Mouse)

Melzer N, Hicking G, Gobel K, Wiendl H. TRPM2 Cation Channels Modulate T Cell Effector Functions and Contribute to Autoimmune CNS Inflammation *PLoS One* 2012 [PMID: 23077651] (ICC/IF, Mouse)

Chung KK, Freestone PS, Lipski J. Expression and functional properties of TRPM2 channels in dopaminergic neurons of the substantia nigra of the rat. *J Neurophysiol*;106(6):2865-75. 2011 Dec. [PMID: 21900507] (IHC, Rat)

Bai JZ, Lipski J. Differential expression of TRPM2 and TRPV4 channels and their potential role in oxidative stress-induced cell death in organotypic hippocampal culture. *Neurotoxicology*. 2010 Jan 12. [PMID: 20064552] (WB, ICC/IF, Rat)



Procedures

ICC/IF protocol specific for TRPM2 antibody (NB110-81601)

Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,000 and incubate for 10 minutes. Wash a third time for 10 minutes.
9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.





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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.

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

