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Datasheet for 200-301-F77

IP3 Receptor Antibody

Overview

Description:	Anti-IP3 Receptor (MOUSE) Monoclonal Antibody - 200-301-F77
Item No.:	200-301-F77
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Mouse

Product Details

Background:	Inositol 1,4,5-triphosphate receptor, also known as IP3R or InsP3R, is a member of the intracellular calcium release channel family, and is located in the endoplasmic reticulum. It functions as a Ca2+ release channel for intracellular stores of calcium ions. There are three types of IP3 receptors (IP3 receptor 1, 2 and 3) that require the second messenger inositol 1,4,5-triphosphate (IP3) for activation. Four individual receptor subunits, resulting in homo- or heterooligomerization of the receptor isoform, form a functional channel. Phosphorylation of IP3R1 at Ser1756 by cyclic- AMP-dependent protein kinase A (PKA) regulates the sensitivity of IP3R1 to IP3 and may thus be a mode of regulation for Ca2+ release. IP3R1 mediated calcium release appears to have an effect on the induction of long term depression (LTD) in Purkinje cells.
Synonyms:	IP3 Receptor, S24-18,Inositol 1,4,5-trisphosphate receptor type 1, IP3 receptor isoform 1, IP-3-R, IP3R1,Type 1 inositol 1,4,5-trisphosphate receptor, Insp3r
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	S24-18
Format:	IgG1

Target Details

Gene Name:	Itpr1
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Recombinant Protein
Immunogen:	IP3 Receptor Antibody was produced in mice by repeated immunizations raised against a fusion protein of the cytoplasmic carboxyl terminus region of rat type1 IP3R inositol 1,4,5-triphosphate receptor type 1, Itpr1.
Purity/Specificity:	Anti-IP3 Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with IP3 from Human, Mouse, and Rat based on 100% homology with the immunizing sequence. Cross-reactivity with IP3 from other sources has not been determined. Ion Channels research.
Relevant Links:	• NCBI - NP_001007236.2 • GeneID - 25262 • UniProtKB - P29994

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-IP3 Antibody is tested for use in WB, IP, and IHC. Expect a band approximately ~300kDa on specific lysates. Does not recognize type 2 or type 3 IP3R's. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IF:	1.0-10ug/mL
IHC:	0.1-1.0ug/mL
WB:	1ug/mL

Formulation

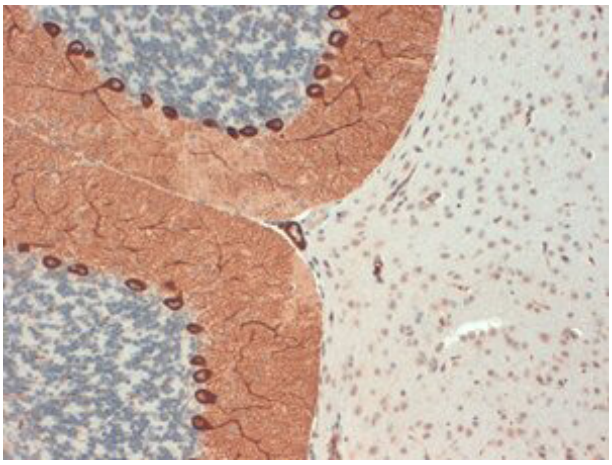
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	1X PBS, pH 7.4
Preservative:	0.09% (w/v) Sodium Azide
Stabilizer:	50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry
Immunohistochemistry of mouse anti-IP3 antibody. Tissue: cerebellum tissue in mouse. Primary Antibody: IP3 antibody at 1µg/mL for 1h at RT. Secondary antibody: Peroxidase mouse secondary at 1:10,000 for 45 min at RT. Localization: Endoplasmic reticulum membrane. Staining: IP-3 as brown signal.

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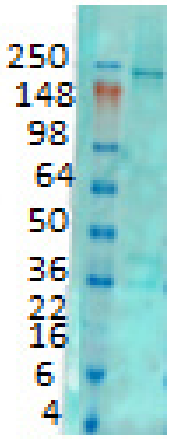

Western Blot

Western Blot of mouse anti-IP3 total antibody. Lane 1: Rat Brain membrane tissue. Primary antibody: IP-3 total antibody at 1:1000 for overnight at 4°C. Secondary antibody: Goat anti-mouse IgG HRP secondary antibody at 1:10,000 for 45 min at RT. Block: 5% Blotto overnight 4°C. Predicted/Observed size: 313.2kDa/200 kDa for IP3. Other band(s): none.

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