

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 Ca ²⁺ 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 Ca ²⁺ 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 • GenelD - 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

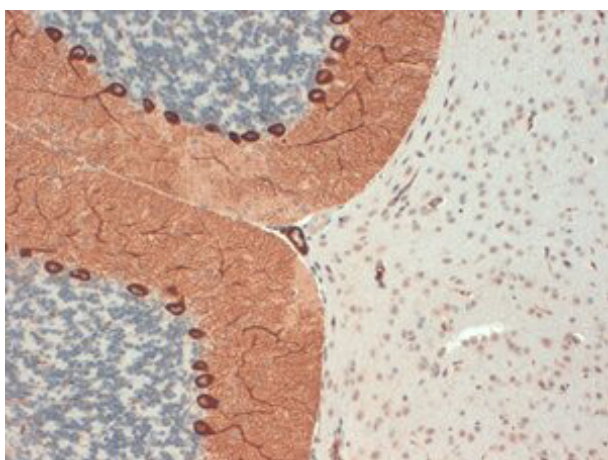
Shipping & Handling

Shipping Condition:	Dry Ice
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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.

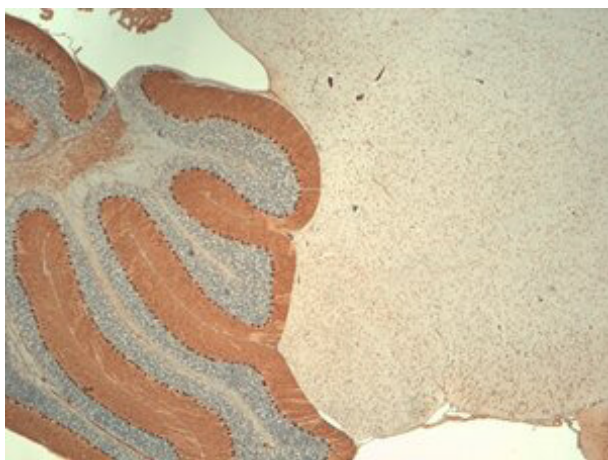
Expiration: Expiration date is one (1) year from date of receipt.

Images



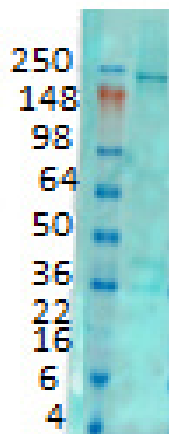
Immunohistochemistry

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.



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.

**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.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.