

Technical Data Sheet

Purified Mouse Anti-IP3R-3**Product Information**

Material Number:	610312
Alternate Name:	Inositol 1,4,5-triphosphate receptor type III
Size:	50 µg
Concentration:	250 µg/ml
Clone:	2/IP3R-3
Immunogen:	Human IP3R-3 aa. 22-230
Isotype:	Mouse IgG2a
Reactivity:	QC Testing: Human Tested in Development: Cow, Dog, Mouse, Rat
Target MW:	300 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

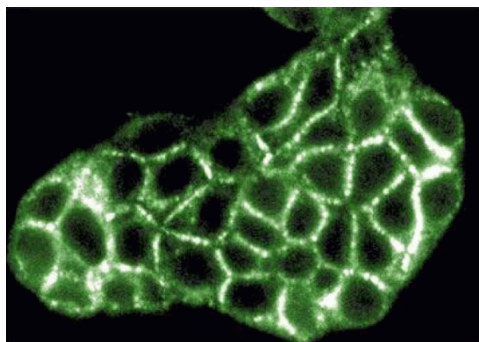
Description

Inositol 1,4,5-triphosphate (IP3) functions as a second messenger for many hormones, growth factors, and neurotransmitters. IP3 causes the release of Ca²⁺ from intracellular stores by binding specific receptors that are coupled to Ca²⁺ channels. A number of studies have identified a family of at least four IP3 receptors (IP3R). The type III receptor (IP3R-3) has been isolated and characterized in human and rat. IP3 receptors are commonly localized in the endoplasmic reticulum, but have also been identified in the nucleus and the plasma membrane. Co-expression of different IP3 receptors is detected in most tissues and cell lines. Although these receptors appear to have a similar specificity for inositol phosphates, the different receptors have been reported to have different affinities for IP3 as follows: type II > type I > type III.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Western blot analysis of IP3R-3 on a HeLa cell lysate.
Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the anti-IP3R-3 antibody.



Immunofluorescence staining of MDCK cells (canine kidney; ATCC CCL-34).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20° C.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunoprecipitation	Tested During Development
Immunohistochemistry-formalin (antigen retrieval required)	Not Recommended

Suggested Companion Products

Catalog Number	Name	Size	Clone
611449	HeLa Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Igs	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Igs	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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Leite MF, Thrower EC, Echevarria W, et al. Nuclear and cytosolic calcium are regulated independently. *Proc Natl Acad Sci U S A.* 2003; 100(5):2975-2980. (Biology: Immunofluorescence, Western blot)

Maranto AR. Primary structure, ligand binding, and localization of the human type 3 inositol 1,4,5-trisphosphate receptor expressed in intestinal epithelium. *J Biol Chem.* 1994; 269(2):1222-1230.(Biology)

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