AIP3R-II (A-5): sc-398434

**BACKGROUND**

Inositol 1,4,5-triphosphate (IP3) functions as a second messenger for a myriad of extracellular stimuli including hormones, growth factors and neurotransmitters. Receptor tyrosine kinases indirectly increase the intracellular levels of IP3 through the activation of phospholipases such as phospholipase C (PLC), which convert phosphatidylinositol-4,5 biphosphate into IP3 and diacylglycerol (DAG). The inositol 1,4,5-triphosphate receptor, IP3R, acts as an inositol triphosphate (IP3)-gated calcium release channel in a variety of cell types. Three IP3 receptor subtypes have been described and are designated IP3R-I, IP3R-II and IP3R-III. IP3R-I is the predominant IP3R subtype expressed in neuronal tissues and the central nervous system, but is also expressed at high levels in the liver.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: ITPR2 (human) mapping to 12p12.1; Itrp2 (mouse) mapping to 6 G3.

**SOURCE**

IP3R-II (A-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 2666-2695 at the C-terminus of IP3R-II of human origin.

**PRODUCT**

Each vial contains 200 µg IgG₂b, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

IP3R-II (A-5) is available conjugated to agarose (sc-398434 AC), 500 µg/0.5 ml agarose in 1 ml, for IP; to HRP (sc-398434 HRP), 200 µg/ml, for WB, IHC(PL) and ELISA; to either phycocythrin (sc-398434 PE), fluorescein (sc-398434 FITC), Alexa Fluor® 488 (sc-398434 AF488), Alexa Fluor® 546 (sc-398434 AF546), Alexa Fluor® 594 (sc-398434 AF594) or Alexa Fluor® 647 (sc-398434 AF647), 200 µg/ml, for WB (RGB), IF, IHC(PL) and FCM; and to either Alexa Fluor® 680 (sc-398434 AF680) or Alexa Fluor® 790 (sc-398434 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398434 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

IP3R-II (A-5) is recommended for detection of IP3R-II of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IP3R-II (A-5) is also recommended for detection of IP3R-II in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for IP3R-II siRNA (h): sc-35698, IP3R-II siRNA (m): sc-35699, IP3R-II shRNA Plasmid (h): sc-35698-SH, IP3R-II shRNA Plasmid (m): sc-35699-SH, IP3R-II shRNA (h) Lentiviral Particles: sc-35698-V and IP3R-II shRNA (m) Lentiviral Particles: sc-35699-V.

Molecular Weight of IP3R-II: 260 kDa.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.