

IP3R-II (L-19): sc-26385

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 bisphosphate 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

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- Jayaraman, T., et al. 1996. Regulation of the inositol 1,4,5-triphosphate receptor by tyrosine phosphorylation. *Science* 272: 1492-1494.
- Matsumoto, M., et al. 1996. Ataxia and epileptic seizures in mice lacking type 1 inositol 1,4,5-triphosphate receptor. *Nature* 379: 168-171.

CHROMOSOMAL LOCATION

Genetic locus: ITPR2 (human) mapping to 12p12.1; Itpr2 (mouse) mapping to 6 G3.

SOURCE

IP3R-II (L-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of IP3R-II of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26385 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IP3R-II (L-19) is recommended for detection of IP3R-II of human, rat and, to a lesser extent, mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 (L-19) is also recommended for detection of IP3R-II in additional species, including equine, canine and bovine.

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.

Positive Controls: A-10 cell lysate: sc-3806.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


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Try **IP3R-II (A-5): sc-398434**, our highly recommended monoclonal alternative to IP3R-II (L-19).