

IP3R-I Polyclonal Antibody

Catalog No: YT2381

Reactivity: Human; Mouse; Rat

Applications: IHC;IF;ELISA

Target: IP3 Receptor

Fields: >>Calcium signaling pathway;>>cGMP-PKG signaling

pathway;>>Phosphatidylinositol signaling system;>>Oocyte

meiosis;>>Autophagy - animal;>>Apoptosis;>>Cellular senescence;>>Vascular

smooth muscle contraction;>>Apelin signaling pathway;>>Gap

junction;>>Platelet activation;>>NOD-like receptor signaling pathway;>>C-type

lectin receptor signaling pathway;>>Circadian entrainment;>>Long-term potentiation;>>Retrograde endocannabinoid signaling;>>Glutamatergic synapse;>>Cholinergic synapse;>>Serotonergic synapse;>>Dopaminergic synapse;>>Long-term depression;>>Inflammatory mediator regulation of TRP channels;>>GnRH signaling pathway;>>Estrogen signaling pathway;>>Thyroid

hormone synthesis;>>Oxytocin signaling pathway;>>Glucagon signaling pathway;>>Renin secretion;>>Aldosterone synthesis and secretion;>>Cortisol synthesis and secretion;>>Parathyroid hormone synthesis, secretion and

action:>>GnRH secretion:>>Cushing syndrome:>>Growth hormone synthesis.

secretion and action;>>Salivary secretion;>>Ga

Gene Name: ITPR1

Protein Name: Inositol 1,4,5-trisphosphate receptor type 1

Human Gene Id: 3708

Human Swiss Prot Q14643

No:

Mouse Gene Id: 16438

Mouse Swiss Prot P11881

No:

Rat Gene ld: 25262

Rat Swiss Prot No: P29994

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Immunogen: The antiserum was produced against synthesized peptide derived from human

InsP3R1. AA range:1566-1615

Specificity: IP3R-I Polyclonal Antibody detects endogenous levels of IP3R-I protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other

applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 314kD

Cell Pathway: Calcium;Phosphatidylinositol signaling system;Oocyte meiosis;Vascular smooth

muscle contraction;Gap junction;Long-term potentiation;Long-term

depression;GnRH;Alzheimer's disease;Huntington's disease;

Background: This gene encodes an intracellular receptor for inositol 1,4,5-trisphosphate.

Upon stimulation by inositol 1,4,5-trisphosphate, this receptor mediates calcium

release from the endoplasmic reticulum. Mutations in this gene cause spinocerebellar ataxia type 15, a disease associated with an heterogeneous group of cerebellar disorders. Multiple transcript variants have been identified for

this gene. [provided by RefSeq, Nov 2009],

Function : alternative products: There is a combination of three alternatively spliced

domains at site SI, SIII and site SII (A and C). Experimental confirmation may be

lacking for some isoforms, disease: Defects in ITPR1 are the cause of

spinocerebellar ataxia type 15 (SCA15) (SCA15) [MIM:606658]. Spinocerebellar ataxia is a clinically and genetically heterogeneous group of cerebellar disorders. Patients show progressive incoordination of gait and often poor coordination of hands, speech and eye movements, due to degeneration of the cerebellum with variable involvement of the brainstem and spinal cord. SCA15 is an autosomal dominant cerebellar ataxia (ADCA). It is very slow progressing form with a wide

range of onset, ranging from childhood to adult. Most patients remain

ambulatory.,domain:The receptor contains a calcium channel in its C-terminal

extremity. Its large N-terminal cytoplasmic region has

Subcellular Endoplasmic reticulum membrane ; Multi-pass membrane protein . Cytoplasmic

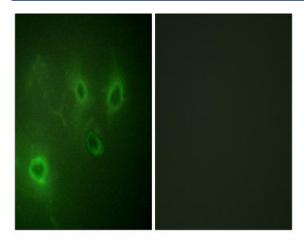


Location:

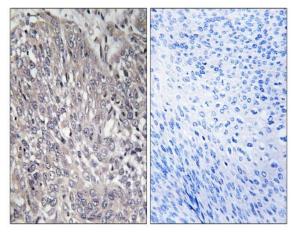
vesicle, secretory vesicle membrane; Multi-pass membrane protein. Cytoplasm, perinuclear region. Endoplasmic reticulum and secretory granules (By similarity).

Expression: Widely expressed.

Products Images



Immunofluorescence analysis of COS7 cells, using InsP3R1 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human cervix carcinoma tissue, using InsP3R1 Antibody. The picture on the right is blocked with the synthesized peptide.