产品名称：IP3R-I Rabbit Polyclonal Antibody
产品货号：APRab12700

产品概述（Summary）

产品名称（Production Name）	IP3R-I Rabbit Polyclonal Antibody
描述（Description）	Rabbit polyclonal Antibody
宿主（Host）	Rabbit
应用（Application）	IHC,ICC/IF,ELISA
种属反应性（Reactivity）	Human,Mouse,Rat

产品性能（Performance）

偶联物（Conjugation）	Unconjugated
修饰（Modification）	Unmodified
同种型（Isotype）	IgG
克隆（Clonality）	Polyclonal
形式（Form）	Liquid
存放说明（Storage）	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液（Buffer）	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
纯化方式（Purification）	Affinity purification

免疫原信息（Immunogen）

基因名（Gene Name）	ITPR1
别名（Alternative Names）	ITPR1; INSP3R1; Inositol 1; 4,5-trisphosphate receptor type 1; IP3 receptor isoform 1; IP3R 1; InsP3R1; Type 1 inositol 1,4,5-trisphosphate receptor; Type 1 InsP3 receptor
基因 ID（Gene ID）	3708.0
蛋白 ID（SwissProt ID）	Q14643.The antiserum was produced against synthesized peptide derived from human InsP3R1. AA range:1566-1615

产品应用（Application）

稀释比（Dilution Ratio）	IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000
蛋白分子量（Molecular Weight）	

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研究背景（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],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 the ligand-binding site in the N-terminus and modulatory sites in the middle portion immediately upstream of the channel region.,function:Intracellular channel that mediates calcium release from the endoplasmic reticulum following stimulation by inositol 1,4,5-trisphosphate.,miscellaneous:Calcium appears to inhibit ligand binding to the receptor, most probably by interacting with a distinct calcium-binding protein which then inhibits the receptor.,PTM:Phosphorylated by cAMP kinase. Phosphorylation prevents the ligand-induced opening of the calcium channels.,PTM:Phosphorylated on tyrosine residues.,similarity:Belongs to the InsP3 receptor family.,similarity:Contains 5 MIR domains.,subunit:Homotetramer. Interacts with TRPC4. The PPXXF motif binds HOM1, HOM2 and HOM3. Interacts with RYR1, RYR2, ITPR1, SHANK1 and SHANK3. Interacts with ERP44 in a pH-, redox state- and calcium-dependent manner which results in the inhibition the calcium channel activity. The strength of this interaction inversely correlates with calcium concentration. Part of cGMP kinase signaling complex at least composed of ACTA2/alpha-actin, CNN1/calponin H1, PLN/phospholamban, PRKG1 and ITPR1. Interacts with AHCYL1 (By similarity). Interacts with MRVI1.,tissue specificity:Widely expressed.,

研究领域（Research Area）

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;

图片（Image Data）

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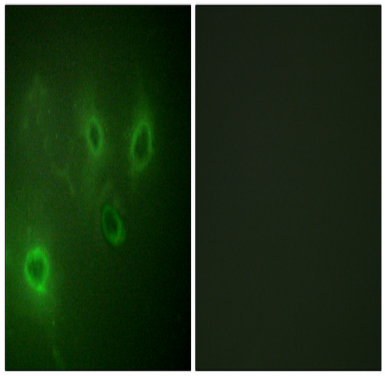
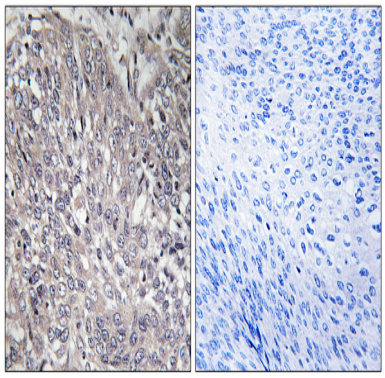


Immunofluorescence analysis of COS7 cells, using InsP3R1 Antibody. The picture on the right is blocked with the synthesized peptide.



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

注意事项（Note）

For research use only .