OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA328735

Itpr1 Rabbit Polyclonal Antibody

Product data:

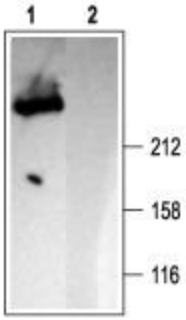
Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)RIGLLGHPPHMNVNPQQPA, corresponding to amino acid residues 2732-2750 of rat IP3Â Receptor-1. Intracellular, C-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Purified on immobilized rProtein A.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	inositol 1,4,5-trisphosphate receptor, type 1
Database Link:	NP_001007236 Entrez Gene 3708 HumanEntrez Gene 16438 MouseEntrez Gene 25262 Rat P29994

View online »

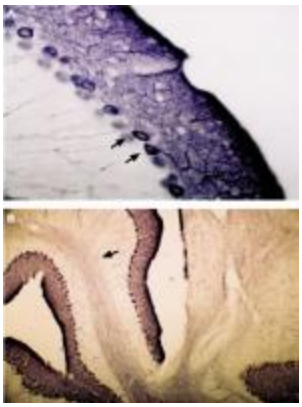
Background: Inositol 1,4,5-triphosphate (IP3) serves as a second messenger for many neurotransmitters, hormones and growth factors. The binding of IP3 to its receptor (IP3R), which is a ligand gated Ca2+ channel, located predominantly at the endoplasmic reticulum, results in a rapid release of Ca2+ from intracellular stores. To date, three known isoforms of IP3R are known (designated IP3R1, IP3R2, and IP3R3) that can work as homotetramers or hetrotetramers. All three receptors have six transmembrane domains and a pore domain between TM5 and TM6. The N-terminus as well as the C-terminus are facing the cytoplasm. Each IP3R consists of an N-terminal ligand binding domain (LBD) and a C-terminal domain which is linked by a long regulatory domain. The C-terminus is constitutively active, suggesting that the regulatory domain is required in order to maintain the suppression of channel activity. IP3R1 is one of the most important channels responsible for Ca2+ release from intracellular stores and was shown to be the predominant isoform expressed in the central nervous system. IP3R1 is a pivotal player in many neuronal functions such as neuronal plasticity, neurite extension and others.

Synonyms: DKFZp313E1334; DKFZp313N1434; Insp3r1; IP3R; IP3R1; SCA15; SCA16

Product images:



Western blot analysis of rat brain membranes: 1. Anti-IP3 Receptor-1 antibody, (1:2000). 2. Anti-IP3 Receptor-1 antibody, preincubated with the control peptide antigen.



Expression of IP3 Receptor-1 in mouse cerebellum. Immunohistochemical staining of mouse cerebellum with Anti-IP3 Receptor-1 antibody. Immunoreactivity appears in Purkinje cells (arrows in A) and their dendritic trees. In addition, axonal processes coarsing through cerebellar white matter are visualized (arrow in B).