

## IP3 Receptor Rabbit mAb

**Catalog # AP76970** 

### **Specification**

## **IP3 Receptor Rabbit mAb - Product Information**

Application
Primary Accession
Reactivity

Host Clonality

Calculated MW

WB

<u>Q14643</u>

Human, Mouse, Rat

Rabbit

**Monoclonal Antibody** 

313929

### IP3 Receptor Rabbit mAb - Additional Information

**Gene ID 3708** 

Other Names ITPR1

**Format** Liquid

### IP3 Receptor Rabbit mAb - Protein Information

Name ITPR1 {ECO:0000303|PubMed:7852357, ECO:0000312|HGNC:HGNC:6180}

#### **Function**

Inositol 1,4,5-trisphosphate-gated calcium channel that, upon inositol 1,4,5-trisphosphate binding, mediates calcium release from the endoplasmic reticulum (ER) (PubMed:<a href="http://www.uniprot.org/citations/10620513" target="\_blank">10620513</a>, PubMed:<a href="http://www.uniprot.org/citations/27108797" target="\_blank">27108797</a>). Undergoes conformational changes upon ligand binding, suggesting structural flexibility that allows the channel to switch from a closed state, capable of interacting with its ligands such as 1,4,5-trisphosphate and calcium, to an open state, capable of transferring calcium ions across the ER membrane (By similarity). Cytoplasmic calcium released from the ER triggers apoptosis by the activation of CAMK2 complex (By similarity). Involved in the regulation of epithelial secretion of electrolytes and fluid through the interaction with AHCYL1 (By similarity). Part of a complex composed of HSPA9, ITPR1 and VDAC1 that regulates mitochondrial calcium-dependent apoptosis by facilitating calcium transport from the ER lumen to the mitochondria intermembrane space thus providing calcium for the downstream calcium channel MCU that directly releases it into mitochondria matrix (By similarity). Regulates fertilization and egg activation by tuning the frequency and amplitude of calcium oscillations (By similarity).

#### **Cellular Location**

Endoplasmic reticulum membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P29994, ECO:0000255} Cytoplasmic vesicle, secretory vesicle membrane {ECO:0000250|UniProtKB:Q9TU34}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P29994, ECO:0000255}. Cytoplasm, perinuclear region. Note=Found in



a complex with HSPA9 and VDAC1 at the endoplasmic reticulum-mitochondria contact sites. {ECO:0000250|UniProtKB:P29994}

**Tissue Location** Widely expressed..

# **IP3 Receptor Rabbit mAb - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IP3 Receptor Rabbit mAb - Images