

## DATASHEET

# IP3R Rabbit Polyclonal Antibody

CAT. NO. APA11073

### KEY FEATURES

|               |   |               |                     |
|---------------|---|---------------|---------------------|
| Target        | IP3R  | Source / Host | Rabbit              |
| Reactivity    | Human, Mouse, Rat   | Clonality     | Polyclonal          |
| Applications  | WB, IHC, IF/ICC   | Conjugation   | Unconjugated        |
| Form / Buffer | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |               | Storage<br>at -20°C |

### BACKGROUND

Inositol 1,4,5-trisphosphate-gated calcium channel that, upon inositol 1,4,5-trisphosphate binding, mediates calcium release from the endoplasmic reticulum (ER). 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. Cytoplasmic calcium released from the ER triggers apoptosis by the activation of CAMK2 complex. Involved in the regulation of epithelial secretion of electrolytes and fluid through the interaction with AHCYL1.

### APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

|        |                |
|--------|----------------|
| WB     | 1:500 - 1:1000 |
| IHC    | 1:50 - 1:200   |
| IF/ICC | 1:100 - 1:500  |

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

### PRODUCT OVERVIEW

|                   |   |
|-------------------|---|
| Description       | Rabbit polyclonal antibody to IP3R  |
| Specificity       | Recognizes endogenous levels of IP3R protein.   |
| Antibody Type     | Primary antibody  |
| Immunogen         | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human IP3R. The exact sequence is proprietary.                             |
| Purification      | The antibody was purified by immunogen affinity chromatography.   |
| Molecular Weight  | Predicted: 313 kD; Observed: 314 kD   |
| Form/Buffer       | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.   |
| Alternative Names | INSP3R1; Inositol 145-trisphosphate receptor type 1; IP3 receptor isoform 1; IP3R 1; InsP3R1; Type 1 inositol 145-trisphosphate receptor; Type 1 InsP3 receptor |
| Gene Symbol       | ITPR1   |
| Entrez Gene       | 3708(Human); 16438(Mouse); 25262(Rat)   |
| SwissProt         | Q14643(Human); P11881(Mouse); P29994(Rat)   |

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

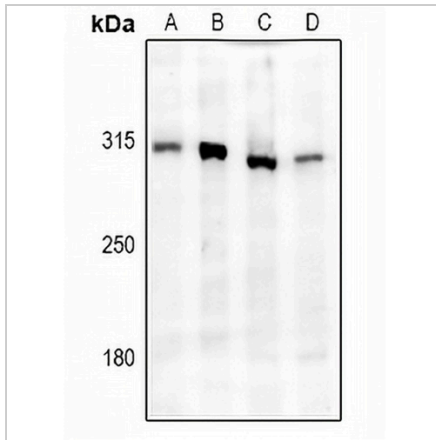
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

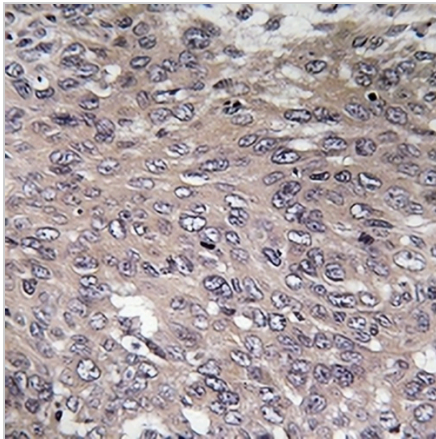
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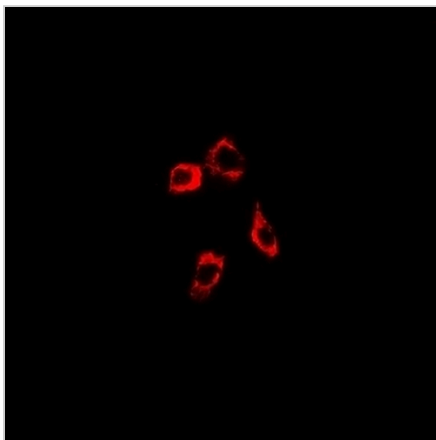
**DATA**



Western blot analysis of IP3R expression in mouse brain (A), rat brain (B), U87MG (C), SGC7901 (D) whole cell lysates. (Predicted band size: 313 kD; Observed band size: 314 kD)



Immunohistochemical analysis of IP3R staining in human cervix cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of IP3R staining in COS7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a Alexa Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.