



## IP3 Receptor, phosphorylated (Ser1756)

### Catalog number

I8471-06

### Supplier

United States Biological

Inositol 1,4,5-triphosphate receptor, also known as IP3R or InsP3R, is a member of the intracellular calcium release channel family, and is located in the endoplasmic reticulum. It functions as a  $Ca^{2+}$  release channel for intracellular stores of calcium ions. There are three types of IP3 receptors (IP3 receptor 1, 2 and 3) that require the second messenger inositol 1,4,5-triphosphate (IP3) for activation (1). Four individual receptor subunits, resulting in homo- or hetero-oligomerization of the receptor isoform, form a functional channel (2). Phosphorylation of IP3R1 at Ser1756 by cyclic-AMP-dependent protein kinase A (PKA) regulates the sensitivity of IP3R1 to IP3 and may thus be a mode of regulation for  $Ca^{2+}$  release (3,4). IP3R1 mediated calcium release appears to have an effect on the induction of long term depression (LTD) in Purkinje cells (5).

### Applications

Suitable for use in Western Blot. Other applications not tested.

### Recommended Dilution

Western Blot: 1:1000, incubate membrane with diluted antibody in TBS, 5% BSA, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Optimal dilutions to be determined by the researcher.

### Storage and Stability

May be stored at 4°C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20°C. Aliquots are stable for 12 months after receipt. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.

### Immunogen

Synthetic phosphopeptide corresponding to residues surrounding Ser1756 of rat IP3 receptor.

### Formulation

Supplied as a liquid in 10mM sodium HEPES, pH 7.5, 150mM sodium chloride, 0.1mg/ml BSA, 50% glycerol.

### Purity

Purified by peptide affinity chromatography.

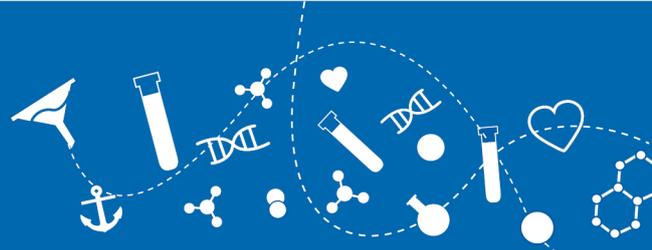
### Specificity

Recognizes endogenous levels of rat IP3 Receptor only when phosphorylated at Ser1756. Species crossreactivity: mouse and human.

### Product Type

Pab

### Source



rat

**Isotype**

IgG

**Grade**

Affinity Purified

**Applications**

WB

**Crossreactivity**

Hu Mo Rt

**Storage**

-20°C

**MW**

320

**BSA Free**

Phosphorylated

**Reference**

(1) Joseph, S.K. (1996) Cell Signal 8, 1-7. (2) Galvan, D.L. et al. (1999) J Biol Chem 274, 29483-92.  
(3) Haug, L.S. et al. (1999) J Biol Chem 274, 7467-73. (4) DeSouza, N. et al. (2002) J Biol Chem 277,  
39397-400. (5) Inoue, T. et al. (1998) J Neurosci 18, 5366-73.