

## Basic Information

<b>Product Name</b>	Anti-ITPR1 Antibody	
<b>Gene Name</b>	ITPR1	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, ICC/IF, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human IP3 receptor recombinant protein (Position: A2411-A2758). Human IP3 receptor shares 98% and 97% amino acid (aa) sequences identity with mouse and rat IP3 receptor, respectively.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	314 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

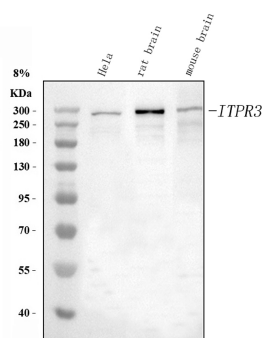
Inositol 1,4,5-trisphosphate receptor type 1, also known as IP3R or IP3R1, is a protein that in humans is encoded by the ITPR1 gene. It is mapped to 3p26.1. The product of the ITPR1 gene is predominantly enriched in cerebellar Purkinje cells but is also concentrated in neurons in the hippocampal CA1 region, caudate-putamen, and cerebral cortex. The ITPR1 gene encodes the inositol 1,4,5-trisphosphate(IP3) receptor, an intracellular IP3-gated calcium channel that modulates intracellular calcium signaling. Upon stimulation by inositol 1,4,5-trisphosphate, this receptor mediates calcium release

from the endoplasmic reticulum. Mutations in ITPR1 cause spinocerebellar ataxia type 15, a disease associated with an heterogeneous group of cerebellar disorders.

## Reference

Anti-ITPR1 Antibody被引用在2文献中。

## Selected Validation Data



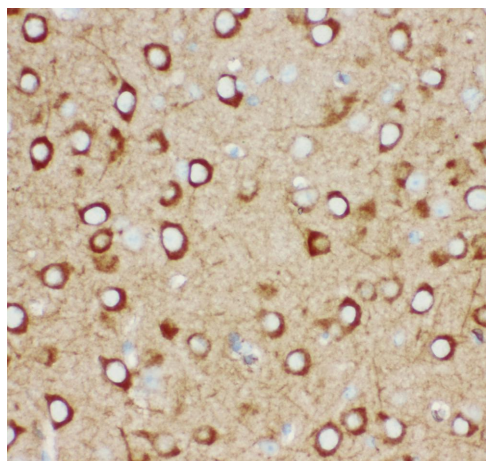
Western blot analysis of anti-ITPR1 antibody (PB9225). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: rat brain tissue lysates,

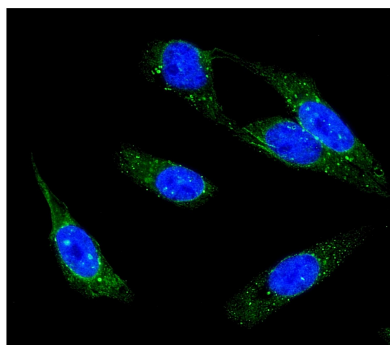
Lane 3: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-ITPR1 antigen affinity purified polyclonal antibody (PB9225) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ITPR1 at approximately 290 kDa. The expected band size for ITPR1 is at 314 kDa.

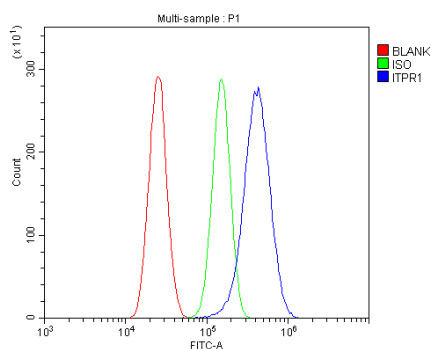


IHC analysis of ITPR1 using anti-ITPR1 antibody (PB9225).

ITPR1 was detected in a paraffin-embedded section of mouse brain tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-ITPR1 Antibody (PB9225) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of ITPR1 using anti-ITPR1 antibody (PB9225). ITPR1 was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-ITPR1 Antibody (PB9225) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of U87 cells using anti-ITPR1 antibody (PB9225).

Overlay histogram showing U87 cells stained with PB9225 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ITPR1 Antibody (PB9225) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.