# abcam

### Product datasheet

# Anti-IP3 receptor antibody ab5804

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#### Overview

Product name Anti-IP3 receptor antibody

**Description** Rabbit polyclonal to IP3 receptor

Host species Rabbit

Tested applications Suitable for: ICC/IF, IHC-P

Species reactivity Reacts with: Rat, Human

Predicted to work with: Cow

Immunogen Synthetic peptide corresponding to Human IP3 receptor aa 1829-1848.

Sequence:

NKKKDDEVDRDAPSRKKAKE

(Peptide available as ab5839)

Run BLAST with
Run BLAST with

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**Storage buffer** Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 99% PBS

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

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#### **Applications**

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab5804 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

**Function** 

Intracellular channel that mediates calcium release from the endoplasmic reticulum following

stimulation by inositol 1,4,5-trisphosphate.

Tissue specificity

Widely expressed.

Involvement in disease

Defects in ITPR1 are the cause of spinocerebellar ataxia type 15 (SCA15) (SCA15) [MIM:606658]. Spinocerebellar ataxia is a clinically and genetically heterogeneous group of cerebellar disorders. Patients show progressive incoordination of gait and often poor coordination of hands, speech and eye movements, due to degeneration of the cerebellum with variable involvement of the brainstem and spinal cord. SCA15 is an autosomal dominant cerebellar ataxia (ADCA). It is very slow progressing form with a wide range of onset, ranging from childhood to adult. Most patients remain ambulatory.

Sequence similarities

Belongs to the InsP3 receptor family.

Contains 5 MIR domains.

Domain

The receptor contains a calcium channel in its C-terminal extremity. Its large N-terminal cytoplasmic region has the ligand-binding site in the N-terminus and modulatory sites in the

 $\label{eq:middle} \mbox{middle portion immediately upstream of the channel region.}$ 

Post-translational modifications

Phosphorylated by cAMP kinase. Phosphorylation prevents the ligand-induced opening of the

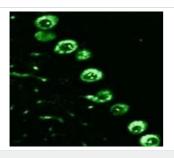
calcium channels.

Phosphorylated on tyrosine residues.

**Cellular localization** 

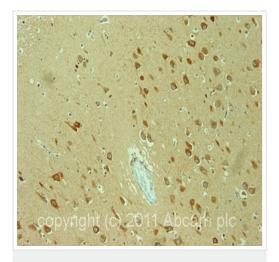
Endoplasmic reticulum membrane.

## **Images**



Immunocytochemistry/ Immunofluorescence - Anti-IP3 receptor antibody (ab5804)

Shows immunolocalization of ITPR1 in rat cerebellum using ab5804.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IP3 receptor antibody (ab5804)

IHC image of ab5804 staining in normal human hippocampus formalin fixed paraffin embedded tissue section, performed on a Leica Bond<sup>TM</sup> system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab5804, 1µg/ml, for 15 mins 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.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

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