

Product datasheet

Anti-P2Y12 antibody [EPR23511-72] ab254347

Recombinant RabMAb

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Overview

Product name	Anti-P2Y12 antibody [EPR23511-72]
Description	Rabbit monoclonal [EPR23511-72] to P2Y12
Host species	Rabbit
Tested applications	Suitable for: Dot blot, mIHC, IHC-P Unsuitable for: Flow Cyt, ICC/IF, IP or WB
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human cerebrum, cerebellum and glioma tissue. mIHC: Human cerebrum tissue, human cerebellum tissue.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR23511-72

Isotype

IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab254347 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

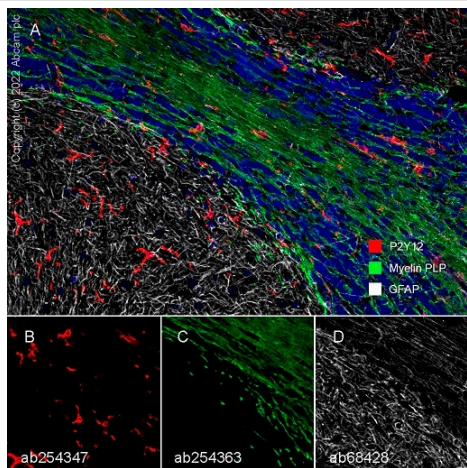
Application	Abreviews	Notes
Dot blot		1/1000.
mlHC		Use at an assay dependent concentration.
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Application notes Is unsuitable for Flow Cyt, ICC/IF, IP or WB.

Target

Function	Receptor for ADP and ATP coupled to G-proteins that inhibit the adenylyl cyclase second messenger system. Not activated by UDP and UTP. Involved in platelets aggregation.
Tissue specificity	Highly expressed in the platelets, lower levels in the brain. Lowest levels in the lung, appendix, pituitary and adrenal gland. Expressed in the spinal cord and in the fetal brain.
Involvement in disease	Defects in P2RY12 are the cause of P2RY12 deficiency (P2RY12D) [MIM:609821]. It is a condition characterized by severe impairment of platelet response to ADP and abnormal bleeding marked by excessive posttraumatic and postsurgical blood loss.
Sequence similarities	Belongs to the G-protein coupled receptor 1 family.
Cellular localization	Cell membrane.

Images

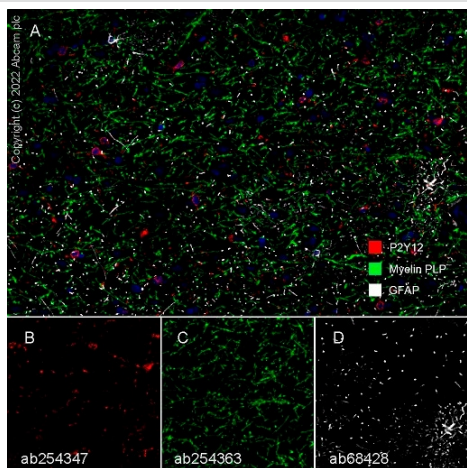


Multiplex immunohistochemistry - Anti-P2Y12 antibody [EPR23511-72] (ab254347)

Fluorescence multiplex immunohistochemical analysis of the human cerebellum (Formalin/PFA-fixed paraffin-embedded sections).

Panel A: merged staining of anti-GFAP (**ab68428**, gray; Opal™690), anti-Myelin PLP (**ab254363**, green; Opal™520) and anti-P2Y12 (ab254347 red; Opal™570) on human cerebellum.

Panel B: anti-P2Y12 stained on microglial cells. Panel C: anti-Myelin PLP stained on myelin sheaths of oligodendrocytes. Panel D: anti-GFAP stained on astrocytes. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of **ab68428** (1/50 dilution), **ab254363** (1/2000 dilution), and ab254347 (1/1000 dilution) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope.



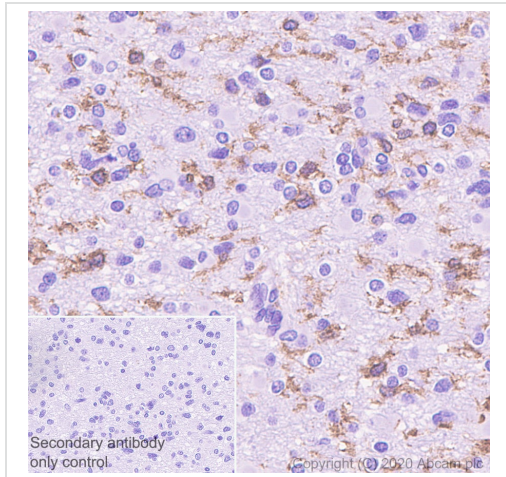
Multiplex immunohistochemistry - Anti-P2Y12 antibody [EPR23511-72] (ab254347)

Fluorescence multiplex immunohistochemical analysis of the human cerebrum (Formalin/PFA-fixed paraffin-embedded sections). Panel A: merged staining of anti-GFAP (**ab68428**, gray; Opal™690), anti-Myelin PLP (**ab254363**, green; Opal™520) and anti-P2Y12 (ab254347, red; Opal™570) on human cerebrum. Panel B: anti-P2Y12 stained on microglial cells. Panel C: anti-Myelin PLP stained on myelin sheaths of oligodendrocytes. Panel D: anti-GFAP stained on astrocytes. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of **ab68428** (1/50 dilution), **ab254363** (1/2000 dilution), and ab254347 (1/1000 dilution) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope.

Panel A: merged staining of anti-GFAP (**ab68428**, gray; Opal™690), anti-Myelin PLP (**ab254363**, green; Opal™520) and anti-P2Y12 (ab254347, red; Opal™570) on human cerebrum.

Panel B: anti-P2Y12 stained on microglial cells. Panel C: anti-Myelin PLP stained on myelin sheaths of oligodendrocytes. Panel D: anti-GFAP stained on astrocytes. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of **ab68428** (1/50 dilution), **ab254363** (1/2000 dilution), and ab254347 (1/1000 dilution) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope.

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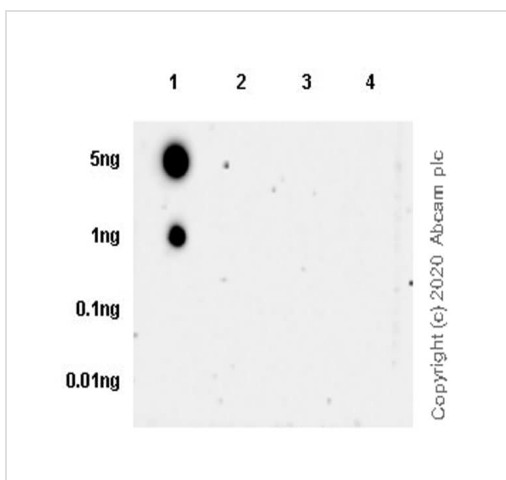


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-P2Y12 antibody [EPR23511-72] (ab254347)

Immunohistochemical analysis of paraffin-embedded Human glioma tissue labeling P2Y12 with ab254347 at 1/1000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining in human glioma (PMID: 30832693). The section was incubated with ab254347 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Dot Blot - Anti-P2Y12 antibody [EPR23511-72] (ab254347)

Dot blot analysis of P2Y12 using ab254347 at 1/1000 dilution (0.569 ug/ml) followed by a Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at 1/100,000 dilution.

Lane 1: Human P2Y12 immunogen peptide

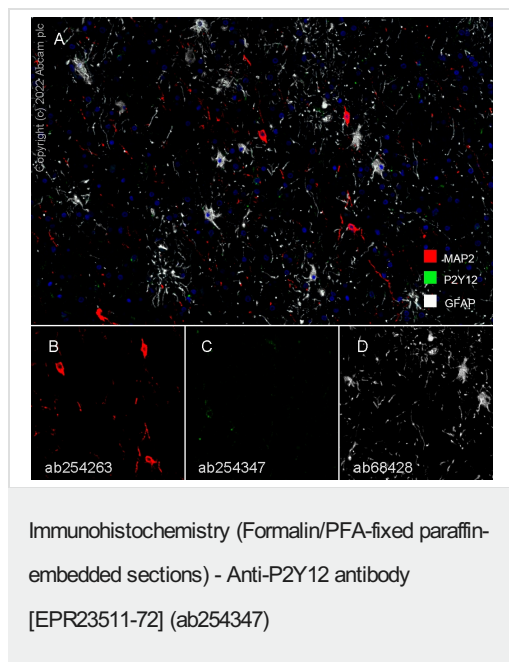
Lane 2: Human P2Y12 non-immunogen peptide

Lane 3: Human P2Y12 non-immunogen peptide

Lane 4: BSA

Exposure time: 3 minutes

Blocking and diluting buffer and concentration: 5% NFDM/TBST.



Fluorescence multiplex immunohistochemical analysis of the Human cerebrum (Formalin/PFA-fixed paraffin-embedded sections).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

Opal Polymer HRP Ms + Rb was used as a secondary antibody. DAPI (blue) was used as a nuclear counter stain.

Panel A: Merged staining of anti-GFAP (gray; Opal™690), anti-P2Y12 (green; Opal™520) and anti-MAP2 (red; Opal™570) on human cerebrum.

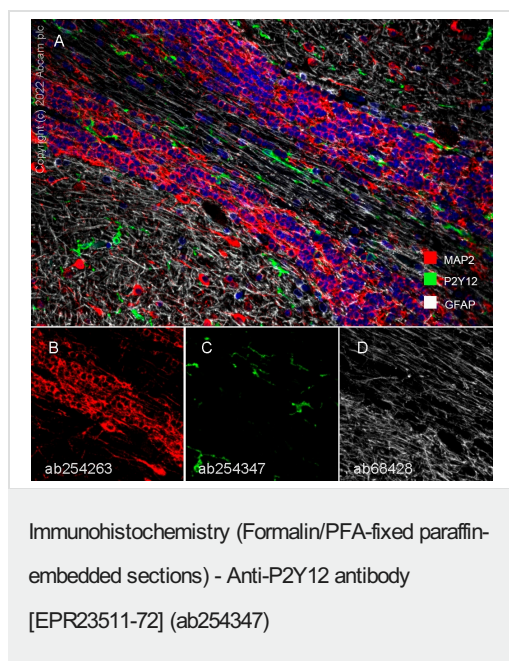
Panel B: Anti-MAP2 stained cell body and dendrites of neurons.

Panel C: Anti-P2Y12 stained on microglial cells.

Panel D: Anti-GFAP stained on astrocytes.

The section was incubated in three rounds of staining: in the order of **ab68428**, ab254347, and **ab254263** for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.



Fluorescence multiplex immunohistochemical analysis of the Human cerebellum (Formalin/PFA-fixed paraffin-embedded sections).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

Opal Polymer HRP Ms + Rb was used as a secondary antibody. DAPI (blue) was used as a nuclear counter stain.

Panel A: Merged staining of anti-GFAP (gray; Opal™690), anti-P2Y12 (green; Opal™520) and anti-MAP2 (red; Opal™570) on human cerebellum.

Panel B: Anti-MAP2 stained cell body and dendrites of neurons.

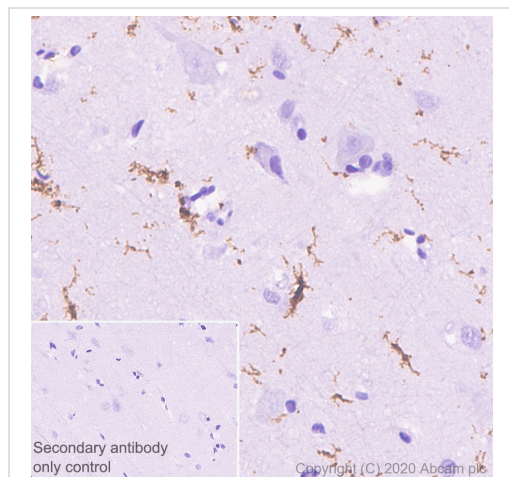
Panel C: Anti-P2Y12 stained on microglial cells.

Panel D: Anti-GFAP stained on astrocytes.

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-P2Y12 antibody [EPR23511-72] (ab254347)

Immunohistochemical analysis of paraffin-embedded Human cerebrum tissue labeling P2Y12 with ab254347 at 1/1000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on microglia (PMID: 30832693). The section was incubated with ab254347 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-P2Y12 antibody [EPR23511-72] (ab254347)

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

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