

# Anti-P2Y12 Antibody [PSH04-48]

## HA722133



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human, Mouse, Rat
<b>Applications:</b>	IHC-P, IHC-Fr, IF-Tissue
<b>Molecular Wt:</b>	Predicted band size: 39 kDa
<b>Clone number:</b>	PSH04-48

**Description:** P2Y12 is a chemoreceptor for adenosine diphosphate (ADP) that belongs to the Gi class of a group of G protein-coupled (GPCR) purinergic receptors. This P2Y receptor family has several receptor subtypes with different pharmacological selectivity, which overlaps in some cases, for various adenosine and uridine nucleotides. The P2Y12 receptor is involved in platelet aggregation and is thus a biological target for the treatment of thromboembolisms and other clotting disorders. Two transcript variants encoding the same isoform have been identified for this gene. In the field of purinergic signaling, the P2Y12 protein on the periphery is found mainly but not exclusively on the surface of blood platelets, and is an important regulator in blood clotting. In the central nervous system, this receptor has been found expressed exclusively on microglia, where it is necessary for physiological and pathological microglial actions, such as monitoring neuronal functions and microglial neuroprotection.

**Immunogen:** Synthetic peptide.

**Positive control:** Human brain tissue, mouse brain tissue, rat brain tissue, mouse cerebrum tissue, mouse hippocampus tissue, rat cerebrum tissue.

**Subcellular location:** Cell membrane.

**Database links:** SwissProt: Q9H244 Human | Q9CPV9 Mouse | Q9EPX4 Rat

**Recommended Dilutions:**

IHC-P	1:1,000
IHC-Fr	1:1,000-1:2000
IF-Tissue	1:200

**Storage Buffer:** PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.

**Purity:** Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

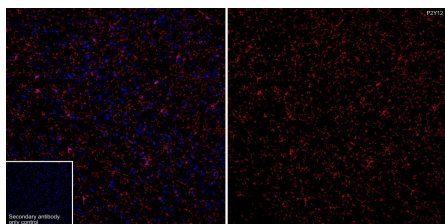
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## Images

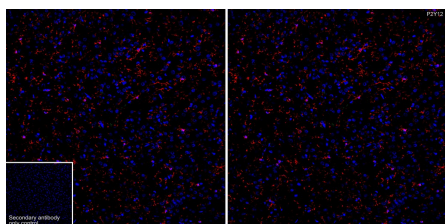
**Fig1:** Immunofluorescence analysis of frozen mouse cerebrum tissue with Rabbit anti-P2Y12 antibody (HA722133) at 1/2,000 dilution.



Important Notice: Antigen retrieval is not required before IHC-Fr staining.

The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA722133, red) at 1/2,000 dilution overnight at 4 °C, washed with PBS. Goat Anti-Rabbit IgG H&L (iFluor™ 594, HA1122) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

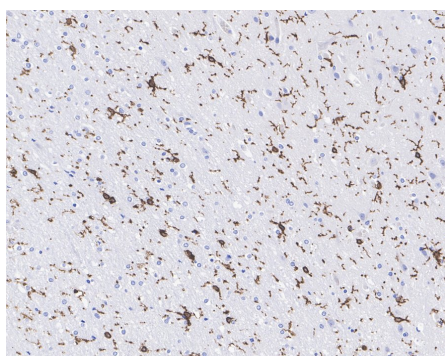
**Fig2:** Immunofluorescence analysis of frozen rat cerebrum tissue with Rabbit anti-P2Y12 antibody (HA722133) at 1/2,000 dilution.



Important Notice: Antigen retrieval is not required before IHC-Fr staining.

The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA722133, red) at 1/2,000 dilution overnight at 4 °C, washed with PBS. Goat Anti-Rabbit IgG H&L (iFluor™ 594, HA1122) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

**Fig3:** Immunohistochemical analysis of paraffin-embedded human brain tissue with Rabbit anti-P2Y12 antibody (HA722133) at 1/1,000 dilution.



The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA722133) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

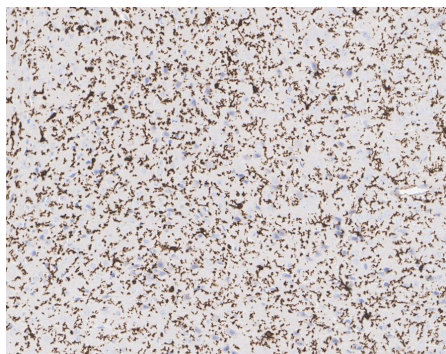
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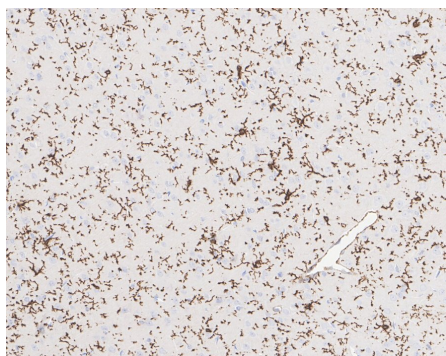
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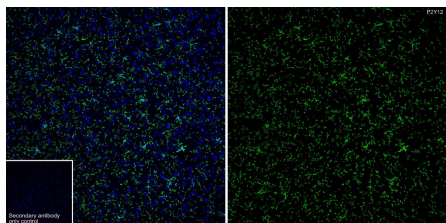
**Fig4:** Immunohistochemical analysis of paraffin-embedded mouse brain tissue with Rabbit anti-P2Y12 antibody (HA722133) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA722133) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



**Fig5:** Immunohistochemical analysis of paraffin-embedded rat brain tissue with Rabbit anti-P2Y12 antibody (HA722133) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA722133) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



**Fig6:** Immunofluorescence analysis of paraffin-embedded mouse cerebrum tissue labeling P2Y12 with Rabbit anti-P2Y12 antibody (HA722133) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA722133, green) at 1/500 dilution overnight at 4 °C, washed with PBS. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

## Background References

1. Chen J et al. P2Y12 inhibitor clopidogrel inhibits renal fibrosis by blocking macrophage-to-myofibroblast transition. *Mol Ther.* 2022 Sep
2. Rolling CC et al. P2Y12 Inhibition Suppresses Proinflammatory Platelet-Monocyte Interactions. *Thromb Haemost.* 2023 Feb

