

## Rabbit Anti-P2Y9 antibody

SL12074R

**Product Name** P2Y9

**Chinese Name** G 蛋白偶联嘌呤受体 p2y9 抗体

**Alias** 5730485F04Rik; G protein coupled receptor 23; G-protein coupled receptor 23; GPR23; LPA receptor 4; LPA-4; LPA4; Lpar4; LPAR4\_HUMAN; Lysophosphatidic acid receptor 4; Lysophosphatidic Acid Receptor P2Y9; P2RY9; P2Y purinoceptor 9; P2Y5 like; P2Y5-like receptor; Purinergic receptor 9.

**Research Area** Neurobiology Channel protein The cell membrane 受体 G protein-coupled receptor G protein signal

**Immunogen Species** Rabbit

**Clonality** Polyclonal

**React Species** Human,Mouse,Rat(predicted:Dog,Pig,Cow,Rabbit,Sheep)

**Applications** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)  
not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 42kDa

**Cellular localization** The cell membrane

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human P2Y9: 175-270/370 <Extracellular>

**Lsotype** IgG

**Purification** affinity purified by Protein A

**Buffer Solution** Human,Mouse,Rat(predicted:Dog,Pig,Cow,Rabbit,Sheep)1M TBS(pH7.4) with 1% BSA, Human,Mouse,Rat(predicted:Dog,Pig,Cow,Rabbit,Sheep)3% Proclin300 and 50% Glycerol.

**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**PubMed**

[PubMed](#)

Nucleotides are emerging as important extracellular signaling molecules that mediate several effects, such as proliferation, differentiation, chemotaxis and cytokine release. The P2 receptor family is activated by the binding of nucleotides and is divided into two subfamilies, P2X and P2Y. The P2X receptor family is comprised of ligand-gated ion channels that allow for the increased permeability of calcium into the cell in response to extracellular ATP. The P2Y receptor family are G protein-coupled receptors which mediate the effects of extracellular nucleotides, primarily through the activation of phospholipase C. To some extent, the P2Y receptors can also activate potassium channels or, alternatively, inhibit adenylate cyclase and N-type calcium channels in response to extracellular nucleotides. P2Y9 is activated by lysophosphatidic acid (LPA), a lipid mediator involved in cell proliferation, differentiation, survival and death. In hamsters, P2Y9 mRNA is significantly expressed in ovary tissue compared to other tissues, and innervation with 1-oleoyl LPA increases intracellular calcium ion concentration and stimulates adenylyl cyclase activity. P2Y9 is structurally related to nucleotide receptors, and shares 20-24% amino acid homology with the three other LPA receptors (LPA1, LPA2, LPA3).

**Product  
Detail**

**Function:**

Receptor for lysophosphatidic acid (LPA), a mediator of diverse cellular activities. Transduces a signal by increasing the intracellular calcium ions and by stimulating adenylyl cyclase activity. The rank order of potency for agonists of this receptor is 1-oleoyl- > 1-stearoyl- > 1-palmitoyl- > 1-myristoyl- > 1-alkyl- > 1-alkenyl-LPA.

**Subcellular Location:**

Cell membrane; Multi-pass membrane protein.

**Tissue Specificity:**

High expression in ovary. Not detected in the brain regions thalamus, putamen, caudate, frontal cortex, pons, hypothalamus and hippocampus.

**Similarity:**

Belongs to the G-protein coupled receptor 1 family.

**SWISS:**

Q8BLG2

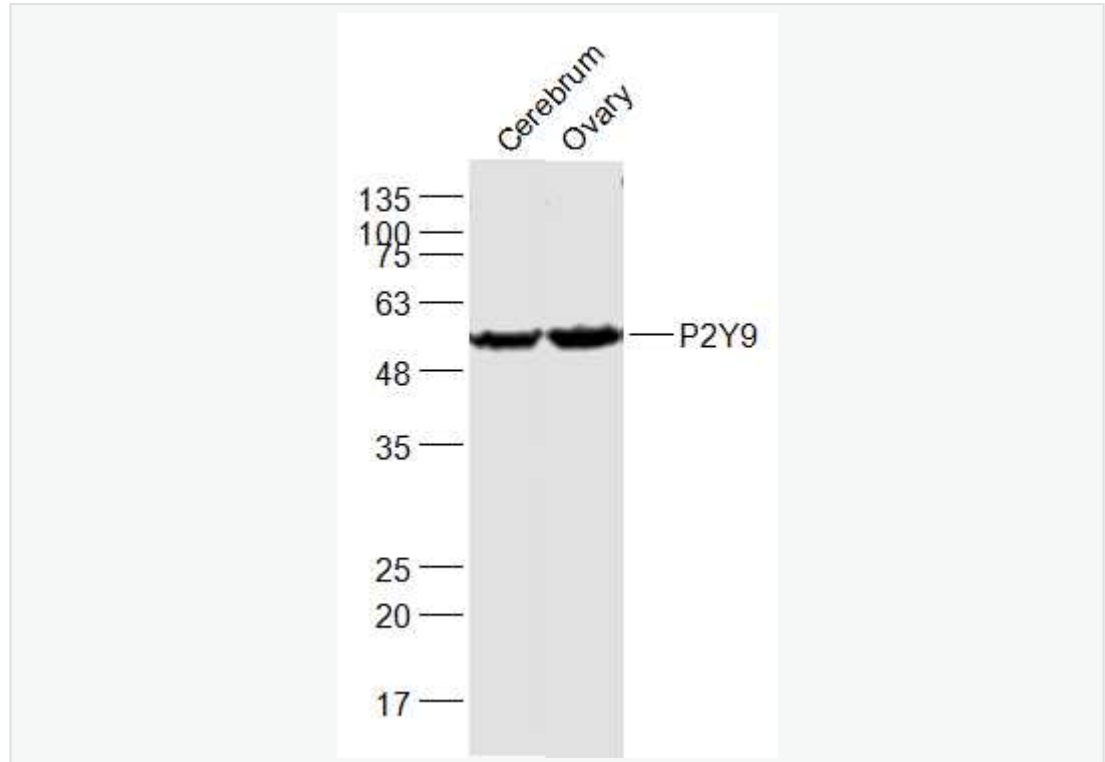
**Gene ID:**

78134

**Database links:**

UniProtKB/Swiss-Prot: Q99677.1

**Product  
Picture**



Sample:

Cerebrum (Mouse) Lysate at 40 ug

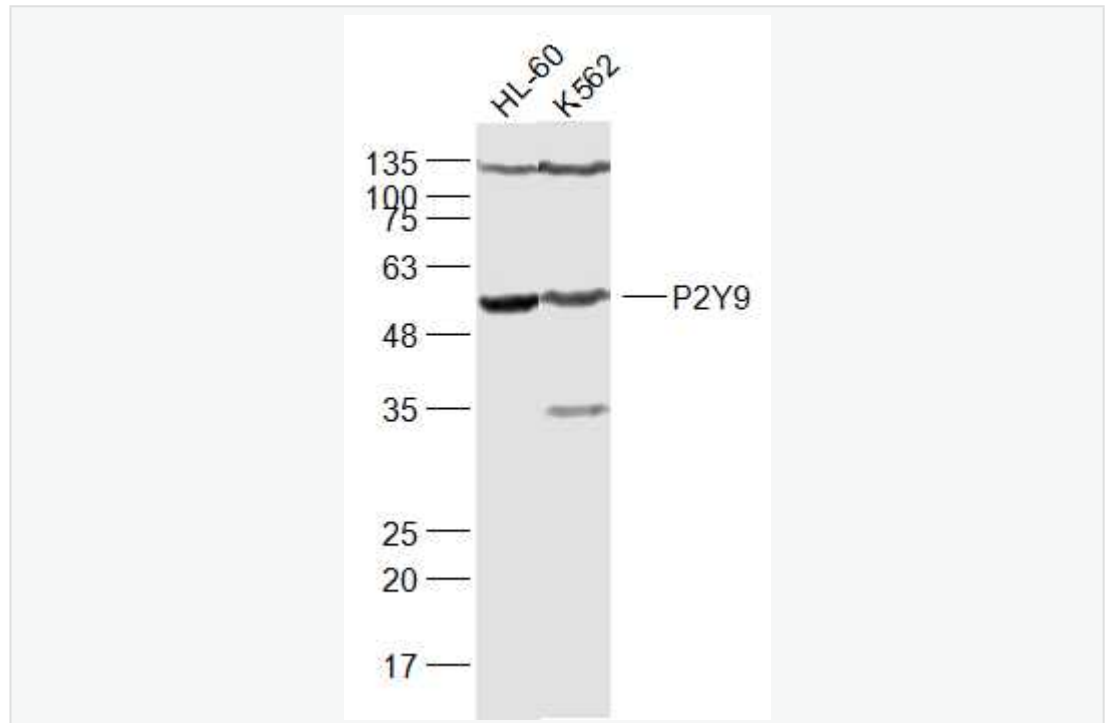
Ovary (Mouse) Lysate at 40 ug

Primary: Anti-P2Y9 (SL12074R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 42 kD

Observed band size: 57 kD



Sample:

HL-60(Human) Cell Lysate at 30 ug

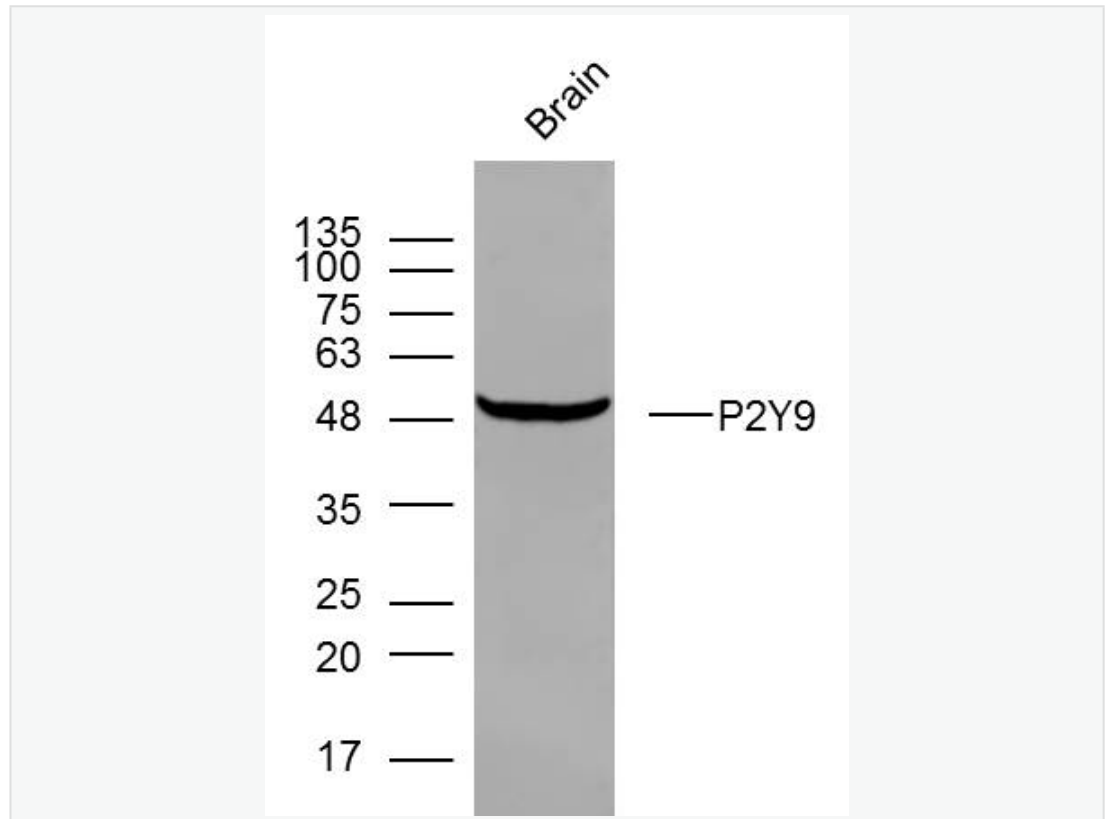
K562(Human) Cell Lysate at 30 ug

Primary: Anti-P2Y9 (SL12074R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 42 kD

Observed band size: 57 kD



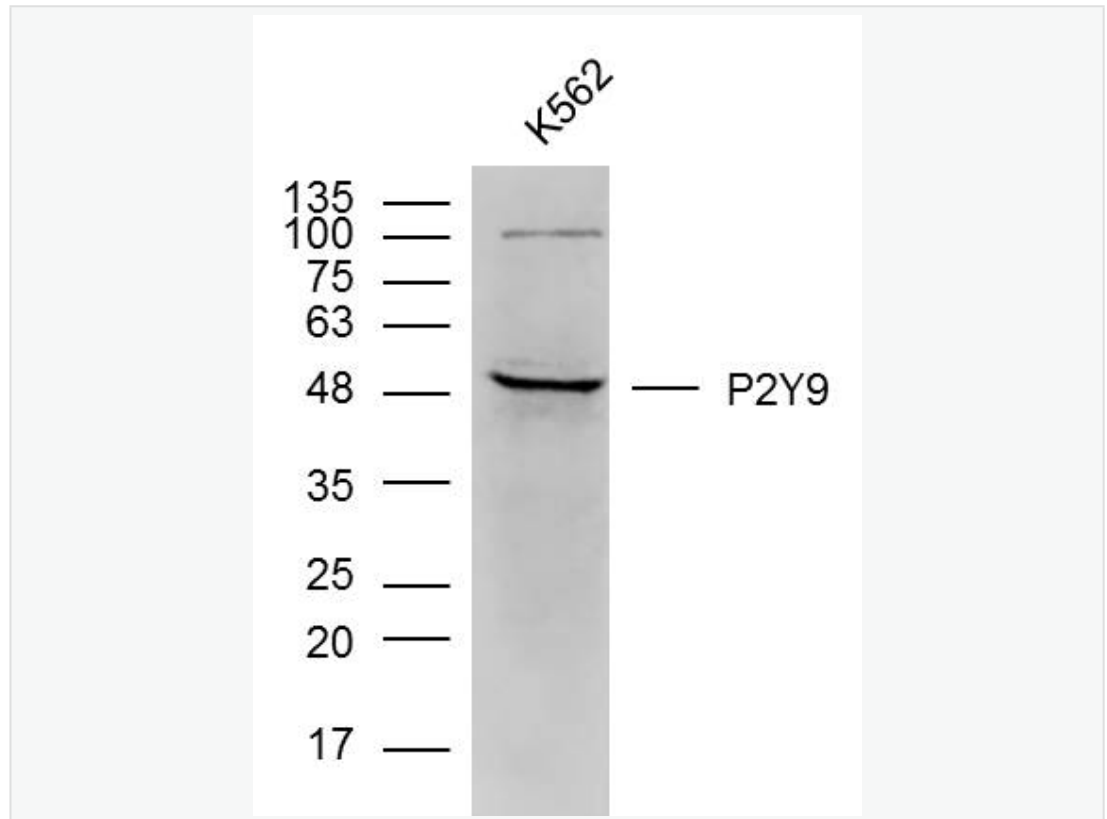
Sample: Brain (mouse) Lysate at 40 ug

Primary: Anti- P2Y9 (SL12074R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 42 kD

Observed band size: 48 kD



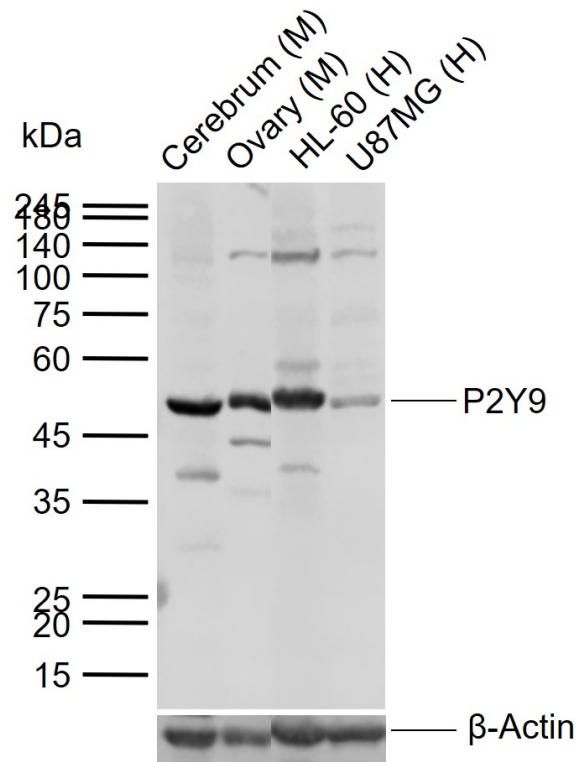
Sample: k562 (human)cell Lysate at 40 ug

Primary: Anti- P2Y9 (SL12074R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 42 kD

Observed band size: 48 kD



Sample:

Lane 1: Mouse Cerebrum tissue lysates

Lane 2: Mouse Ovary tissue lysates

Lane 3: Human HL60 cell lysates

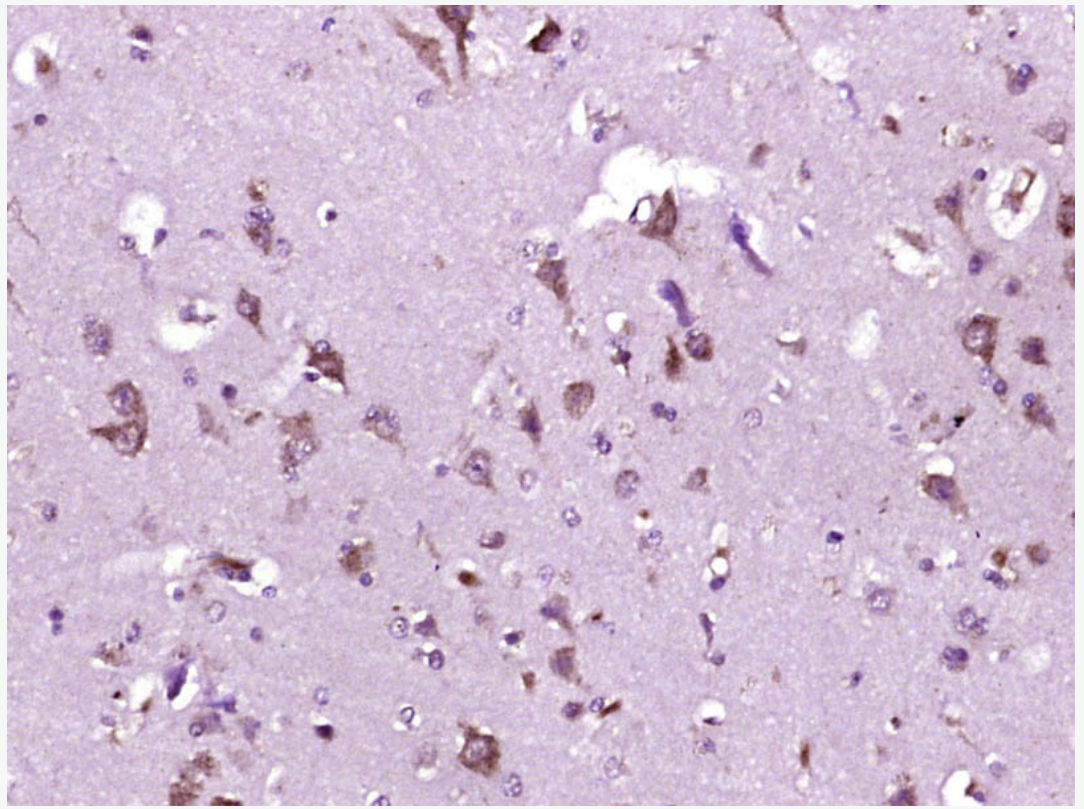
Lane 4: Human U87MG cell lysates

Primary: Anti-P2Y9 (SL12074R) at 1/1000 dilution

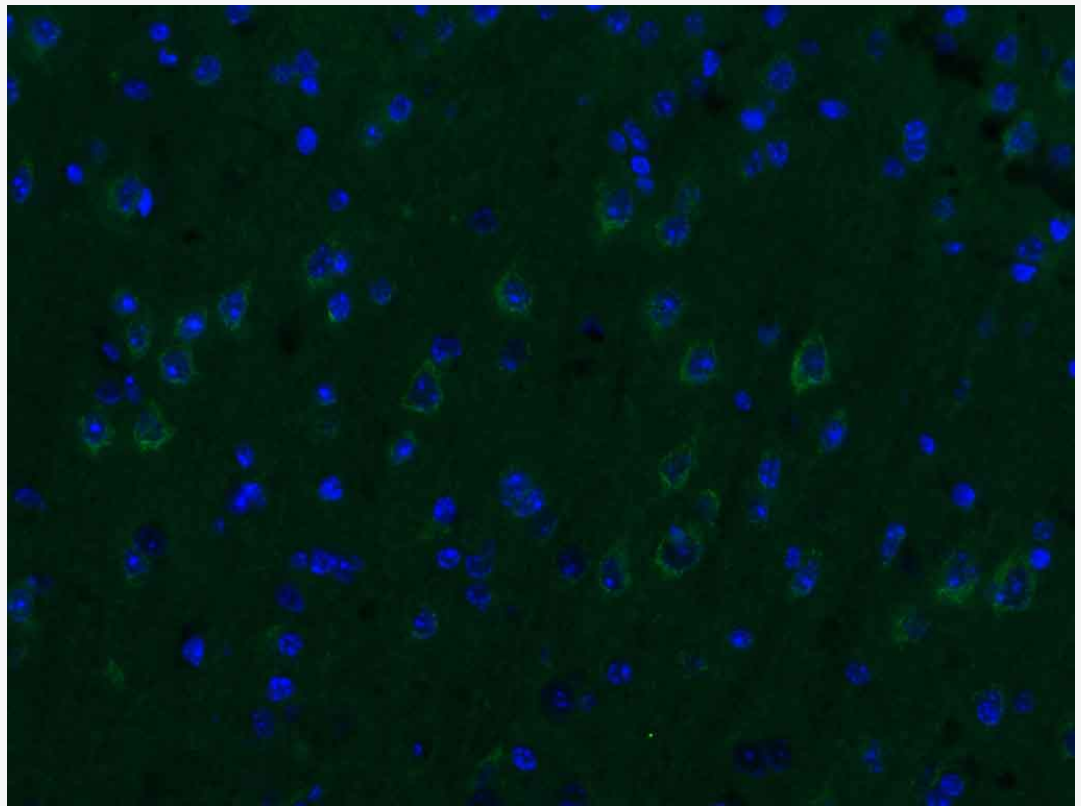
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 42 kDa

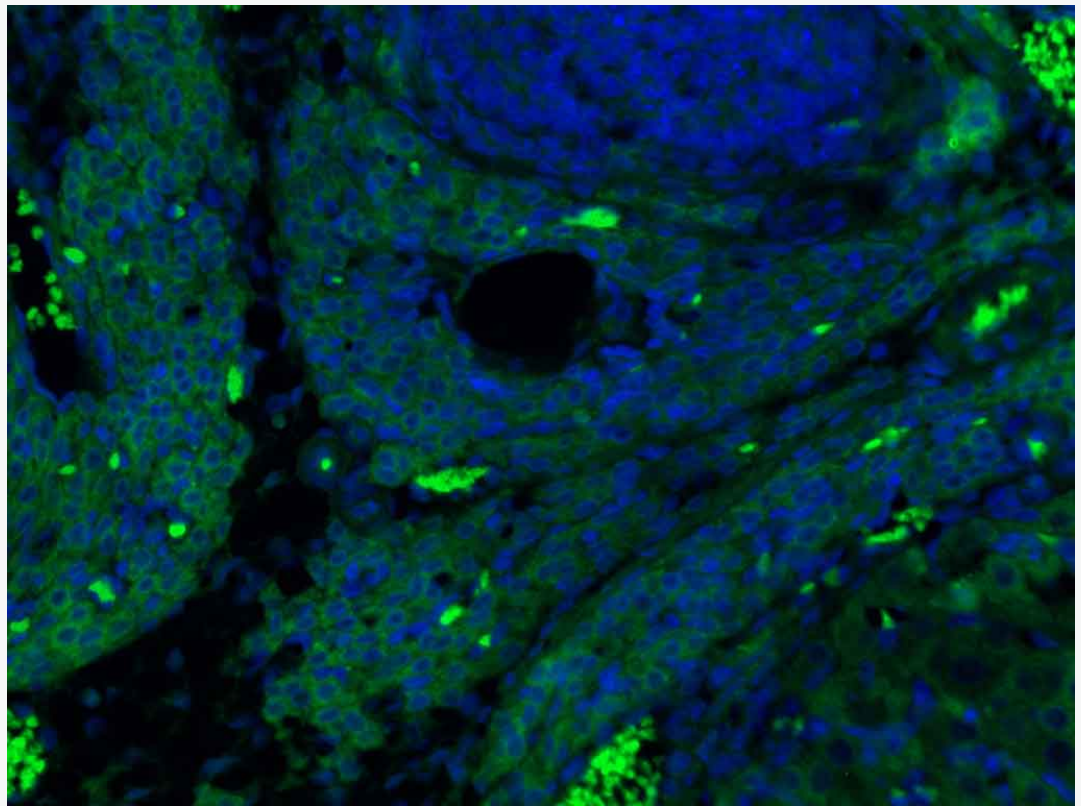
Observed band size: 50 kDa



Paraformaldehyde-fixed, paraffin embedded (Human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (P2Y9) Polyclonal Antibody, Unconjugated (SL12074R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (P2Y9) Polyclonal Antibody, Unconjugated (SL12074R) at 1:200 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (SL0295G-AF488) for 90 minutes, and DAPI for nuclei staining.



Paraformaldehyde-fixed, paraffin embedded (rat ovary); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (P2Y9) Polyclonal Antibody, Unconjugated (SL12074R) at 1:200 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (SL0295G-AF488) for 90 minutes, and DAPI for nuclei staining.