

## Rabbit Anti-LPA2 antibody

SL10368R

**Product Name** LPA2

**Chinese Name** 溶血磷脂酸受体蛋白 2 抗体

**Alias** Endothelial Cell Differentiation Gene 4; Endothelial differentiation lysophosphatidic acid G protein coupled receptor 4; IPA2; LPA receptor 2; LPA receptor EDG4; LPA2; LPAR2; Lysophosphatidic acid receptor Edg4; Edg4; LPAR2\_HUMAN.

**Immunogen Species** Rabbit

**Clonality** Polyclonal

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

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

**Theoretical molecular weight** 39kDa

**Cellular localization** The cell membrane

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human LPA2: 1-100/351 <Extracellular>

**Lsotype** IgG

**Purification** affinity purified by Protein A

**Buffer Solution** 1M TBS(pH7.4) with 1% BSA, 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](#)

**Product Detail** This gene encodes a member of family I of the G protein-coupled receptors, as well as the EDG family of proteins. This protein functions as a lysophosphatidic acid (LPA) receptor

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and contributes to Ca<sup>2+</sup> mobilization, a critical cellular response to LPA in cells, through association with Gi and Gq proteins. An alternative splice variant has been described but its full length sequence has not been determined. [provided by RefSeq, Jul 2008]

**Function:**

Receptor for lysophosphatidic acid (LPA), a mediator of diverse cellular activities. Seems to be coupled to the G(i)/G(o), G(12)/G(13), and G(q) families of heteromeric G proteins. Plays a key role in phospholipase C-beta (PLC-beta) signaling pathway. Stimulates phospholipase C (PLC) activity in a manner that is independent of RALA activation.

**Subunit:**

Interacts with SLC9A3R2/NHERF2, MAGI3 and PLCB3. Interacts with RALA and ADRBK1.

**Subcellular Location:**

Cell surface. Cell membrane; Multi-pass membrane protein. Note=Prior to LPA treatment found predominantly at the cell surface but in the presence of LPA co-localizes with RALA in the endocytic vesicles.

**Tissue Specificity:**

Expressed most abundantly in testes and peripheral blood leukocytes with less expression in pancreas, spleen, thymus and prostate. Little or no expression in heart, brain, placenta, lung, liver, skeletal muscle, kidney, ovary, small intestine, or colon.

**Similarity:**

Belongs to the G-protein coupled receptor 1 family.

**SWISS:**

Q9HBW0

**Gene ID:**

9170

**Database links:**

[Entrez Gene: 9170](#) Human

[Entrez Gene: 53978](#) Mouse

[Omim: 605110](#) Human

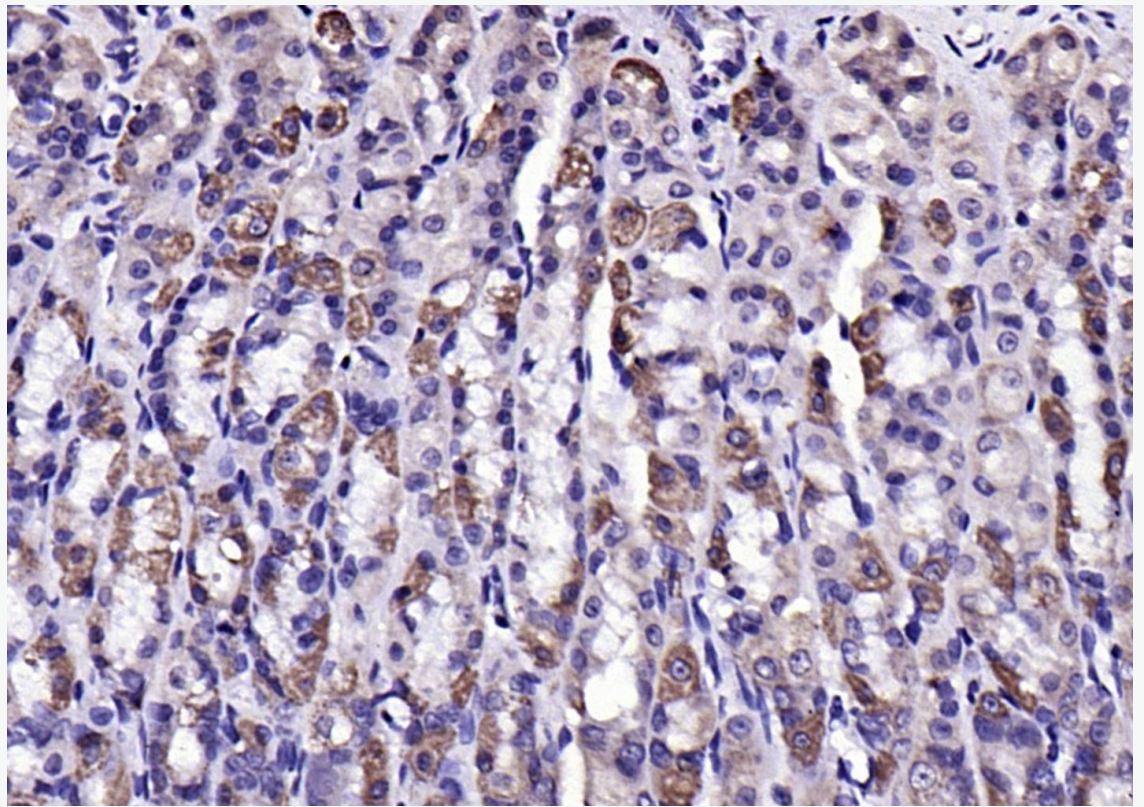
[SwissProt: Q9HBW0](#) Human

[SwissProt: Q9JL06](#) Mouse

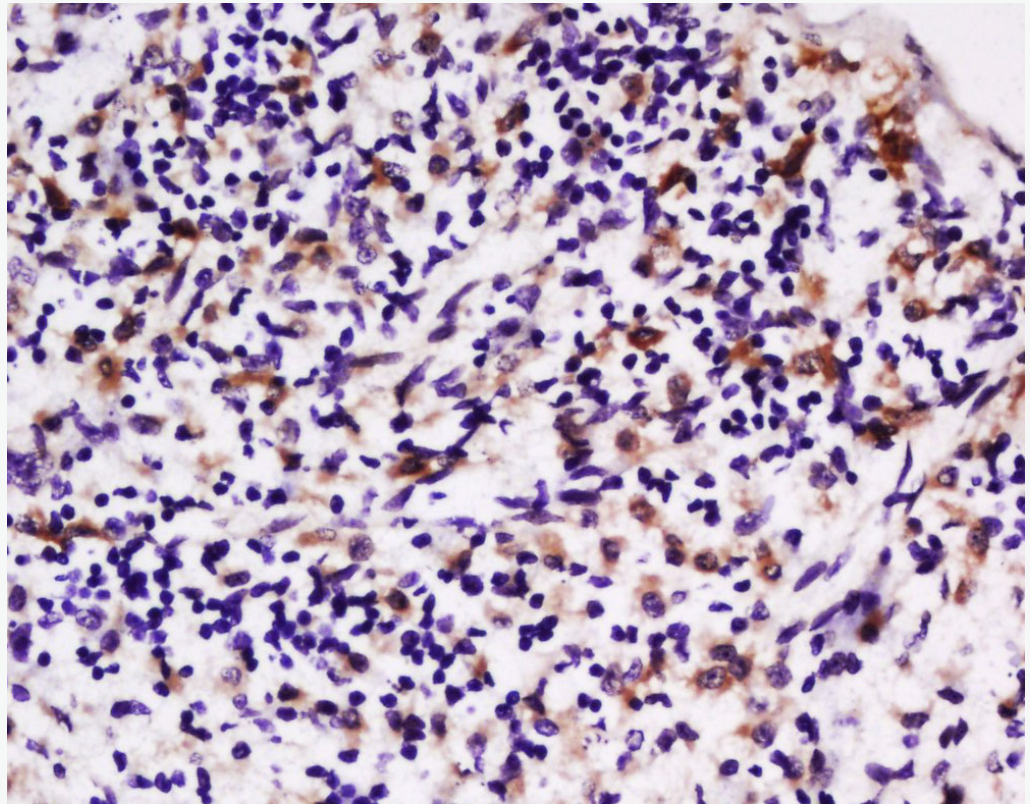
[Unigene: 122575](#) Human

[Unigene: 23253](#) Mouse

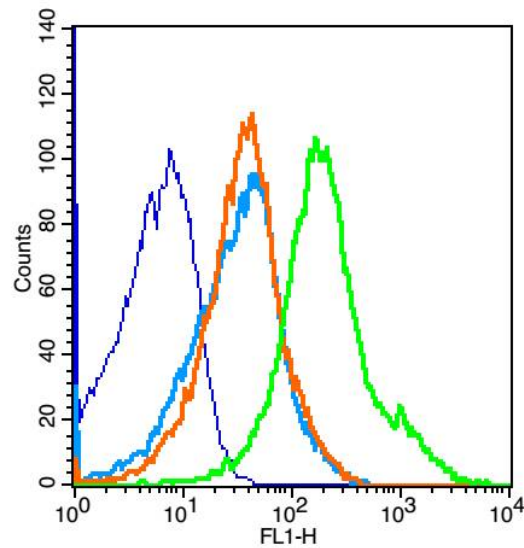
**Product  
Picture**



Paraformaldehyde-fixed, paraffin embedded (mouse stomach); 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 (LPA2) Polyclonal Antibody, Unconjugated (SL10368R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



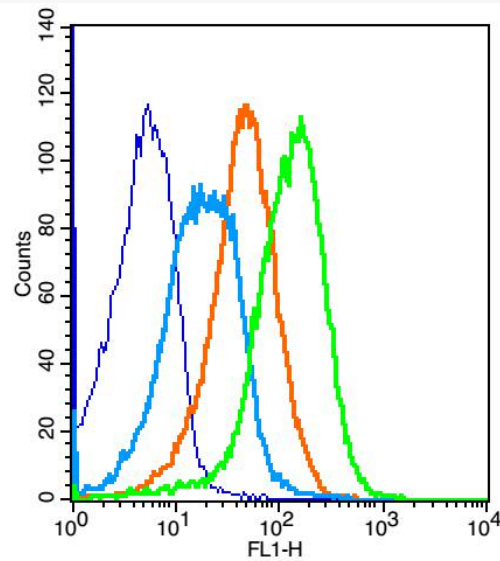
Tissue/cell: rat spleen tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;  
Antigen retrieval: citrate buffer ( 1M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;  
Incubation: Anti-LPA2 Polyclonal Antibody, Unconjugated(SL10368R) 1:100, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Key	Name	Parameter	Gate
—	(mo)Thymocyte-blank.039	FL1-H	G1
—	bs-0295G-FITC-(mo)Th#1E6233.040	FL1-H	G1
—	bs-0295P-(FITC)-(mo)#1E6234.041	FL1-H	G1
—	bs-2946R-(FITC)-(mo)#1E623A.044	FL1-H	G1

Blank control: mouse thymouses(blue)

Isotype Control Antibody: Rabbit IgG(orange) ; Secondary Antibody: Goat anti-rabbit IgG-FITC(white blue), Dilution: 1:100 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 1 $\mu$ l in 100  $\mu$ L1X PBS containing 0.5% BSA(green).



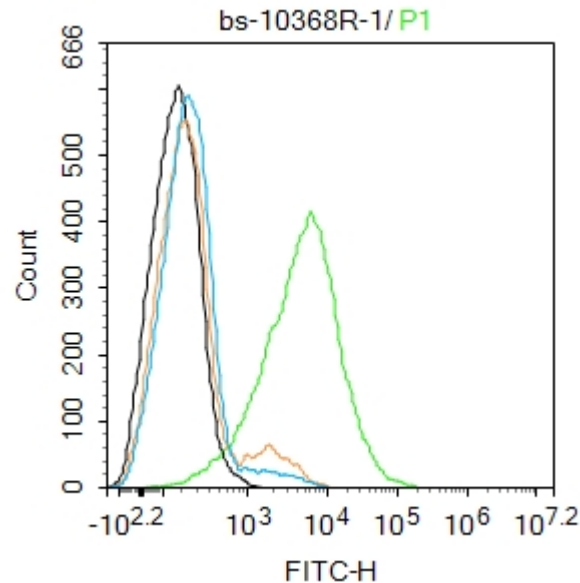
Key	Name	Parameter	Gate
—	(mo)Splenocyte-blank.049	FL1-H	G1
—	bs-0295P(CST)-(FITC)#1E624C.051	FL1-H	G1
—	bs-0295G-FITC(CST)-(#1E624A.050	FL1-H	G1
—	bs-10368R-(FITC)-(mo)Sple-1.059	FL1-H	G1

Positive control: (mo)Splenocytes(2% Paraformaldehyde-fixed )

Isotype Control Antibody: Rabbit IgG,Dilution: 1µg in 100 µl 1 X PBS containing 0.5% BSA

Secondary Antibody: Goat anti-rabbit IgG-FITC,Dilution: 1:200 in 1 X PBS containing 0.5% BSA

Primary Antibody: rabbit Anti-LPA2 (SL10368R),Dilution: 1µg in 100 µl 1X PBS containing 0.5% BSA



Blank control:THP-1.

Primary Antibody (green line): Rabbit Anti-LPA2 antibody (SL10368R)

Dilution: 1 $\mu$ g /10<sup>6</sup> cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-FITC

Dilution: 0.5 $\mu$ g /test.

#### Protocol

The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature.

Acquisition of 20,000 events was performed.