

Rabbit Anti-AT2R antibody

SL0438R

Product Name AT2R

Chinese Name 血管紧张素II受体 1 抗体

Alias AG2S; Agtr 1; Agtr1; AGTR1_HUMAN; Agtr1a; AGTR1B; Ang II; Angiotensin II receptor type 1; Angiotensin II type 1 receptor; Angiotensin II type-1 receptor; Angiotensin receptor 1; Angiotensin receptor 1B; AT 1B; AT 1r; AT-1B; AT-1r; AT1; At1a; AT1AR; AT1B; AT1BR; AT1R; AT2R1; AT2R1A; AT2R1B; HAT1R; Type 1 angiotensin II receptor; Type 1B angiotensin II receptor; Type-1 angiotensin II receptor.

Research Area Tumour Cardiovascular Cell biology immunology vascular endothelial cell

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human, Mouse, Rat,

Applications 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 41kDa

Cellular localization The cell membrane

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human AT2R: 151-250/359
<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.

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Angiotensin II (Ang II) is an important physiological effector of blood pressure and volume regulation through vasoconstriction, aldosterone release, sodium uptake and thirst stimulation. Although Ang II interacts with two types of cell surface receptors, AT1 and AT2, most of the major cardiovascular effects seem to be mediated through AT1. Molecular cloning of the AT1 protein has shown it to be a member of the G protein-associated seven transmembrane protein receptor family. Ang II treatment of cells results in activation of several signal transduction pathways as evidenced by tyrosine phosphorylation of several proteins and induction of others. PLC β is phosphorylated after 30 seconds of treatment with Angiotensin II, indicating this as an early signal transduction event. Ang II treatment also stimulates phosphorylation of Shc, FAK and MAP kinases, and induces MKP-1, indicating stimulation of growth factor pathways. Ang II stimulation through AT1 has been shown to activate the JAK/Stat pathway involving a direct interaction between JAK2 and AT1 as demonstrated by coimmunoprecipitation. The AT1 receptor has no cytoplasmic kinase domain, but is able to function as a substrate for Src kinases and has several putative phosphorylation sites.

Function:

Receptor for angiotensin II. Mediates its action by association with G proteins that activate a phosphatidylinositol-calcium second messenger system.

**Product
Detail**

Subunit:

Interacts with MAS1 (Probable). Interacts with ARRB1 (By similarity).

Subcellular Location:

Cell membrane; Multi-pass membrane protein.

Tissue Specificity:

Liver, lung, adrenal and adrenocortical adenomas.

Post-translational modifications:

C-terminal Ser or Thr residues may be phosphorylated.

DISEASE:

Defects in AGTR1 are a cause of renal tubular dysgenesis (RTD). RTD is an autosomal recessive severe disorder of renal tubular development characterized by persistent fetal anuria and perinatal death, probably due to pulmonary hypoplasia from early-onset oligohydramnios (the Potter phenotype).

Similarity:

Belongs to the G-protein coupled receptor 1 family.

SWISS:
P30556

Gene ID:
185

Database links:

[Entrez Gene: 185](#) Human

[Entrez Gene: 11607](#) Mouse

[Entrez Gene: 11608](#) Mouse

[Entrez Gene: 24180](#) Rat

[Entrez Gene: 81638](#) Rat

[Omim: 106165](#) Human

[SwissProt: P30556](#) Human

[SwissProt: P29754](#) Mouse

[SwissProt: P29755](#) Mouse

[SwissProt: P25095](#) Rat

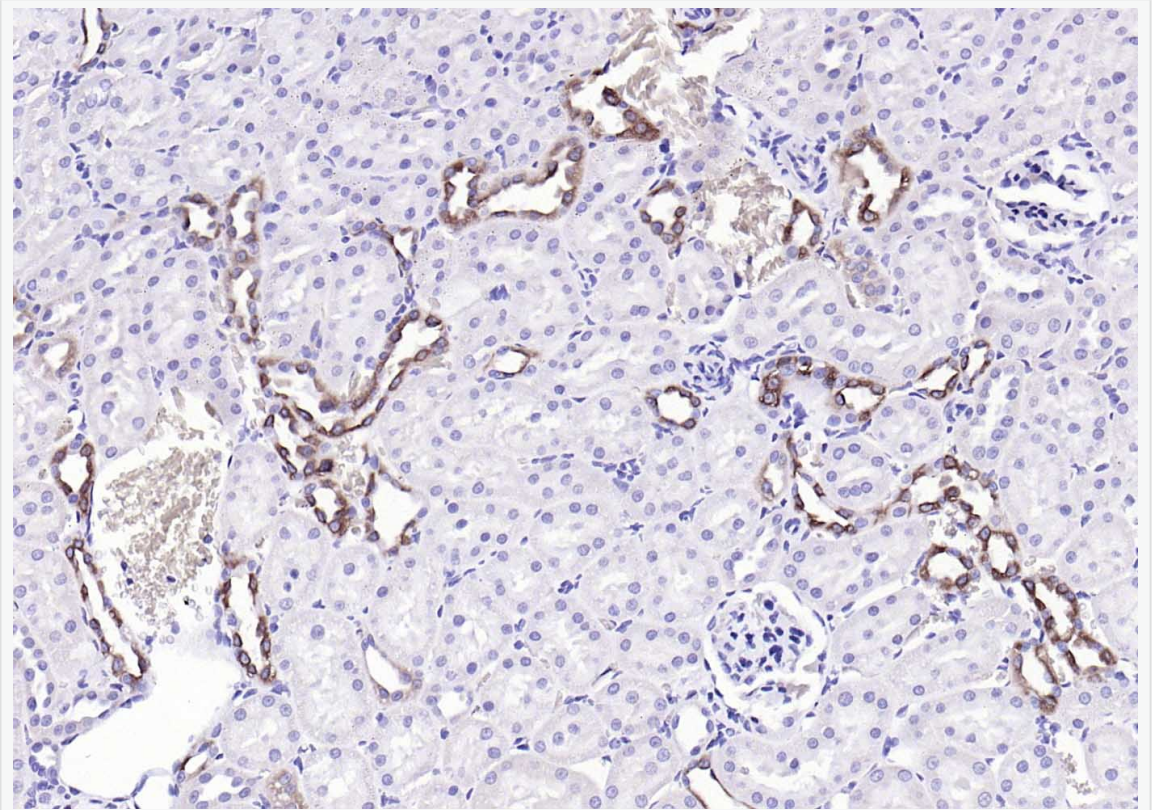
[SwissProt: P29089](#) Rat

[Unigene: 477887](#) Human

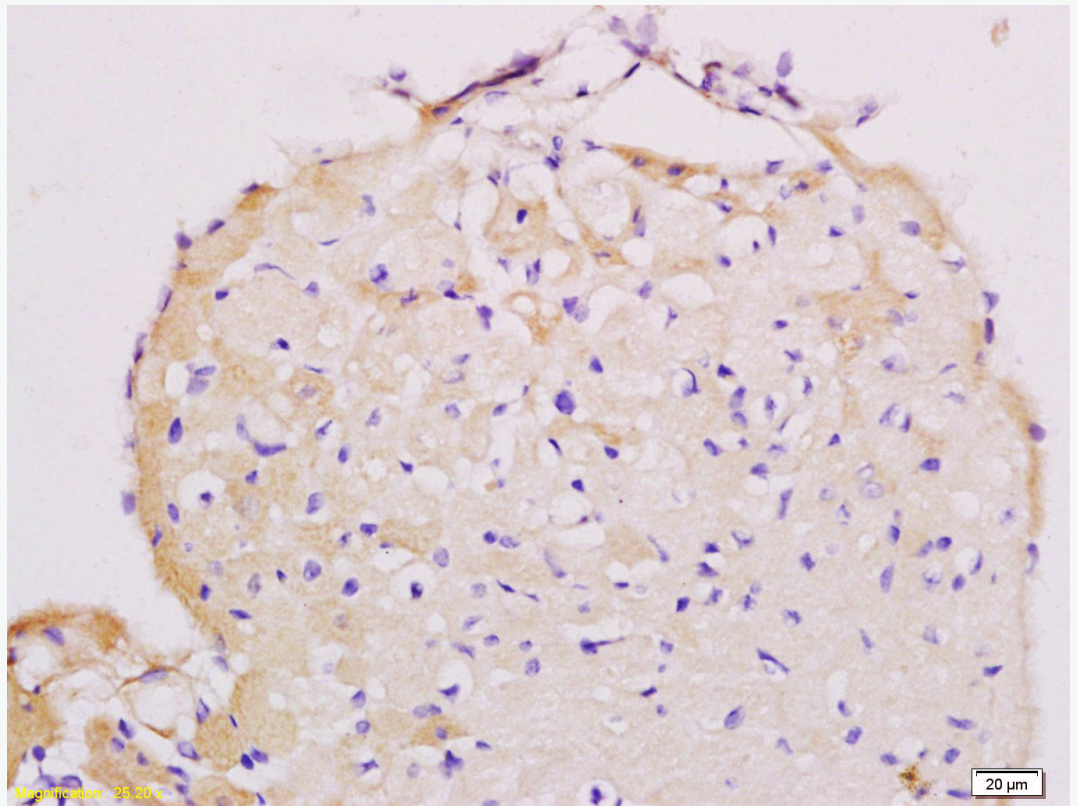
[Unigene: 728754](#) Human

主要用于心、脑、血管病及 Tumour 的基础研究。

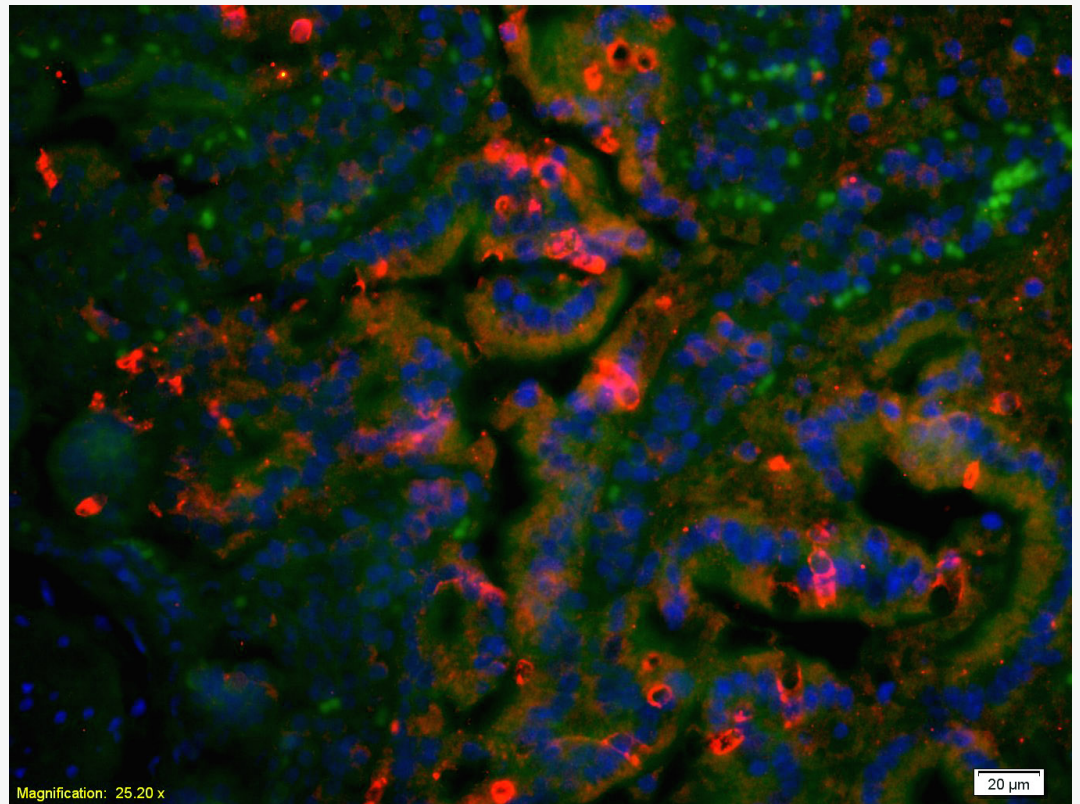
**Product
Picture**



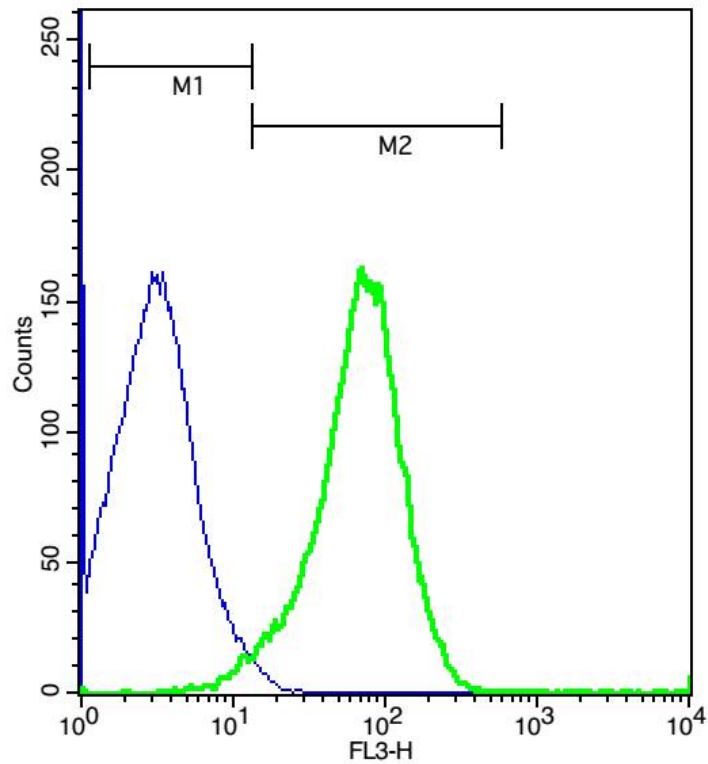
Paraformaldehyde-fixed, paraffin embedded (rat kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (AT2R) Polyclonal Antibody, Unconjugated (SL0438R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: mouse heart 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-AT2R/AT1 Polyclonal Antibody, Unconjugated(SL0438R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat colon tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Blocking
buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-AT2R/AT1 Polyclonal Antibody, Unconjugated(SL0438R) 1:200,
overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3
conjugated(SL0295G-Cy3)used at 1:200 dilution for 40 minutes at 37°C.
DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



Cell: (mo)Splenocytes(2% Paraformaldehyde fixed for 10 minutes).

Concentration: 1:50.

Incubation: 40 minutes.

Host/Blank: (mo)Splenocytes.

Flow cytometric analysis of Rabbit Anti-AT2R/PE-Cy5.5 Conjugated antibody (SL0438R-PE-Cy5.5)(green) compared with control in the absence of primary antibody (blue) followed by mouse spleen cells.