

## Rabbit Anti-Angiopoietin-1 antibody

SL0800R

**Product Name** Angiopoietin-1

**Chinese Name** 血管生成素-1 抗体

**Alias** ANG; AGP 1; AGP1; AGPT; ANG 1; ANG1; Angiopoietin1; ANGPT 1; ANGPT1; ANGPT-1; Angiopoietin-1; Angiopoietin 1; ANG-1; angiopoietin-1 isoform 1 precursor; ANGPI\_HUMAN.

**Research Area** Tumour Cardiovascular Cell biology Growth factors and hormones

**Immunogen Species** Rabbit

**Clonality** Polyclonal

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

**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** 55kDa

**Cellular localization** Secretory protein

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human Angiopoietin 1: 276-375/498

**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](#)

Angiopoietins are proteins with important roles in vascular development and angiogenesis. All angiopoietins bind with similar affinity to an endothelial cell-specific tyrosine-protein kinase receptor. The protein encoded by this gene is a secreted glycoprotein that activates the receptor by inducing its tyrosine phosphorylation. It plays a critical role in mediating reciprocal interactions between the endothelium and surrounding matrix and mesenchyme and inhibits endothelial permeability. The protein also contributes to blood vessel maturation and stability, and may be involved in early development of the heart. Alternative splicing results in multiple transcript variants encoding distinct isoforms.[provided by RefSeq, Dec 2010].

**Function:**

Binds and activates TEK/TIE2 receptor by inducing its dimerization and tyrosine phosphorylation. Plays an important role in the regulation of angiogenesis, endothelial cell survival, proliferation, migration, adhesion and cell spreading, reorganization of the actin cytoskeleton, but also maintenance of vascular quiescence. Required for normal angiogenesis and heart development during embryogenesis. After birth, activates or inhibits angiogenesis, depending on the context. Inhibits angiogenesis and promotes vascular stability in quiescent vessels, where endothelial cells have tight contacts. In quiescent vessels, ANGPT1 oligomers recruit TEK to cell-cell contacts, forming complexes with TEK molecules from adjoining cells, and this leads to preferential activation of phosphatidylinositol 3-kinase and the AKT1 signaling cascades. In migrating endothelial cells that lack cell-cell adhesions, ANGPT1 recruits TEK to contacts with the extracellular matrix, leading to the formation of focal adhesion complexes, activation of PTK2/FAK and of the downstream kinases MAPK1/ERK2 and MAPK3/ERK1, and ultimately to the stimulation of sprouting angiogenesis. Mediates blood vessel maturation/stability. Implicated in endothelial developmental processes later and distinct from that of VEGF. Appears to play a crucial role in mediating reciprocal interactions between the endothelium and surrounding matrix and mesenchyme.

**Product  
Detail**

**Subunit:**

Homooligomer. Interacts with TEK/TIE2.

**Subcellular Location:**

Secreted.

**Post-translational modifications:**

Glycosylated.

**Similarity:**

Contains 1 fibrinogen C-terminal domain.

**SWISS:**

Q15389

**Gene ID:**  
284

**Database links:**

[Entrez Gene: 284](#) Human

[Entrez Gene: 11600](#) Mouse

[Omim: 601667](#) Human

[SwissProt: Q15389](#) Human

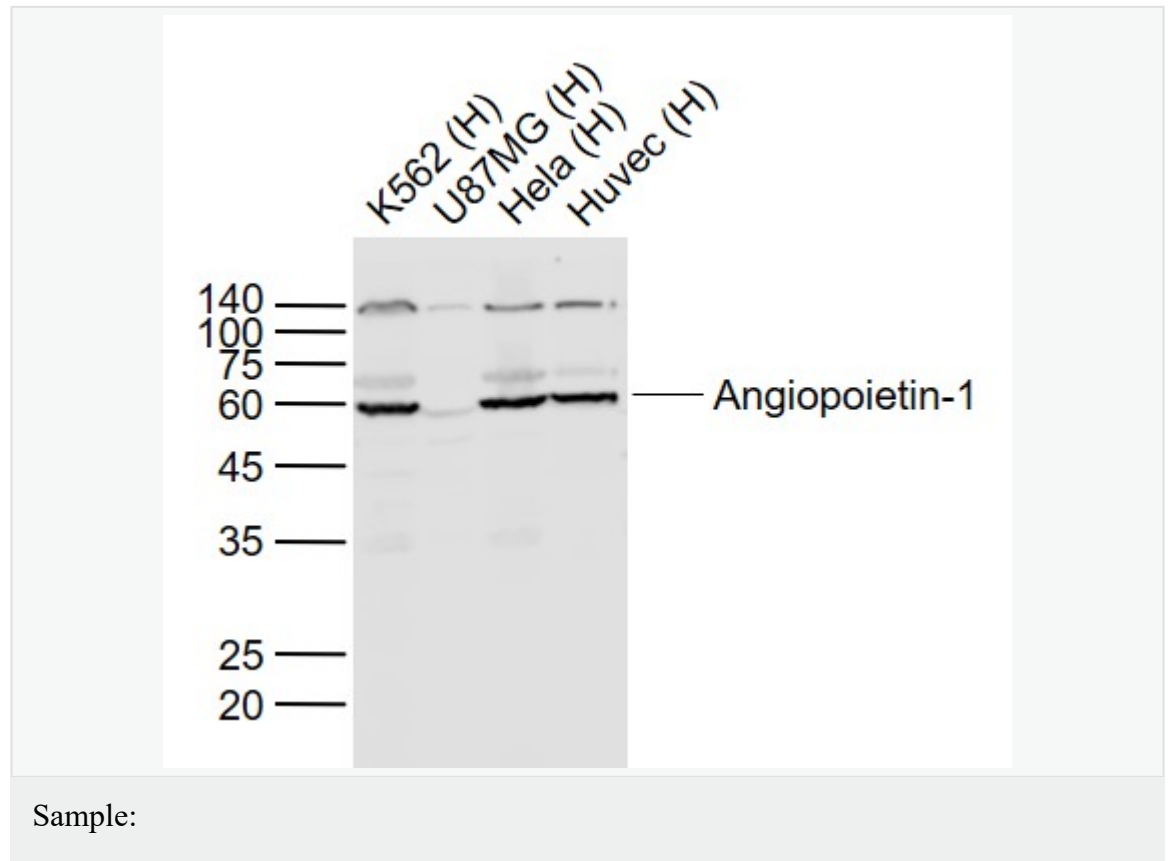
[SwissProt: O08538](#) Mouse

[Unigene: 369675](#) Human

[Unigene: 309336](#) Mouse

Ang1/2 与血管生成关系最为密切,目前有关该家族成员在 Tumour 血管生成中的研究正日益增多。近年来也用于 Diabetes 导致的血管损伤研究也是热门课题。

**Product  
Picture**



Lane 1: K562 (Human) Cell Lysate at 30 ug

Lane 2: U87MG (Human) Cell Lysate at 30 ug

Lane 3: Hela (Human) Cell Lysate at 30 ug

Lane 4: Huvec (Human) Cell Lysate at 30 ug

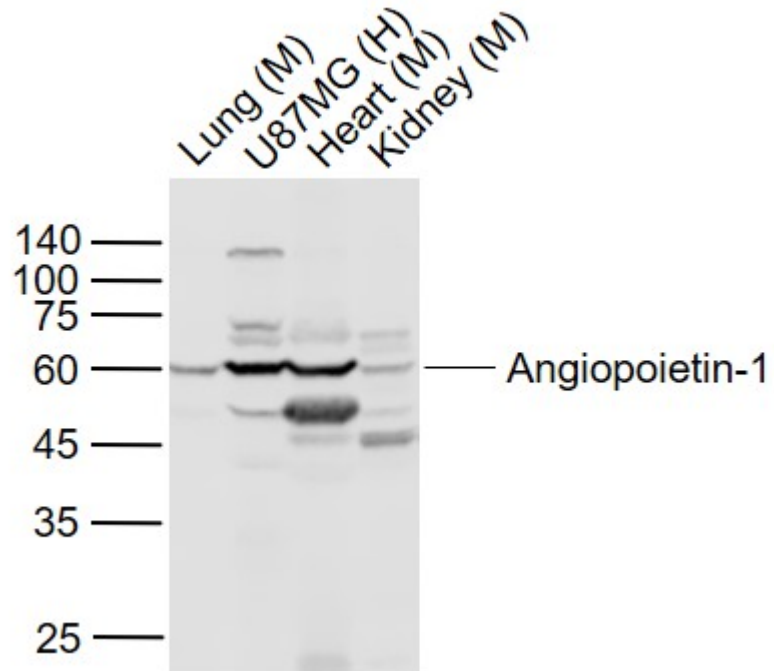
Primary:

Anti-Angiopoietin-1 (SL0800R) at 1/1000 dilution

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

Predicted band size: 60 kD

Observed band size: 60 kD



Sample:

Lane 1: Lung (Mouse) Lysate at 40 ug

Lane 2: U87MG (Human) Cell Lysate at 30 ug

Lane 3: Heart (Mouse) Lysate at 40 ug

Lane 4: Kidney (Mouse) Lysate at 40 ug

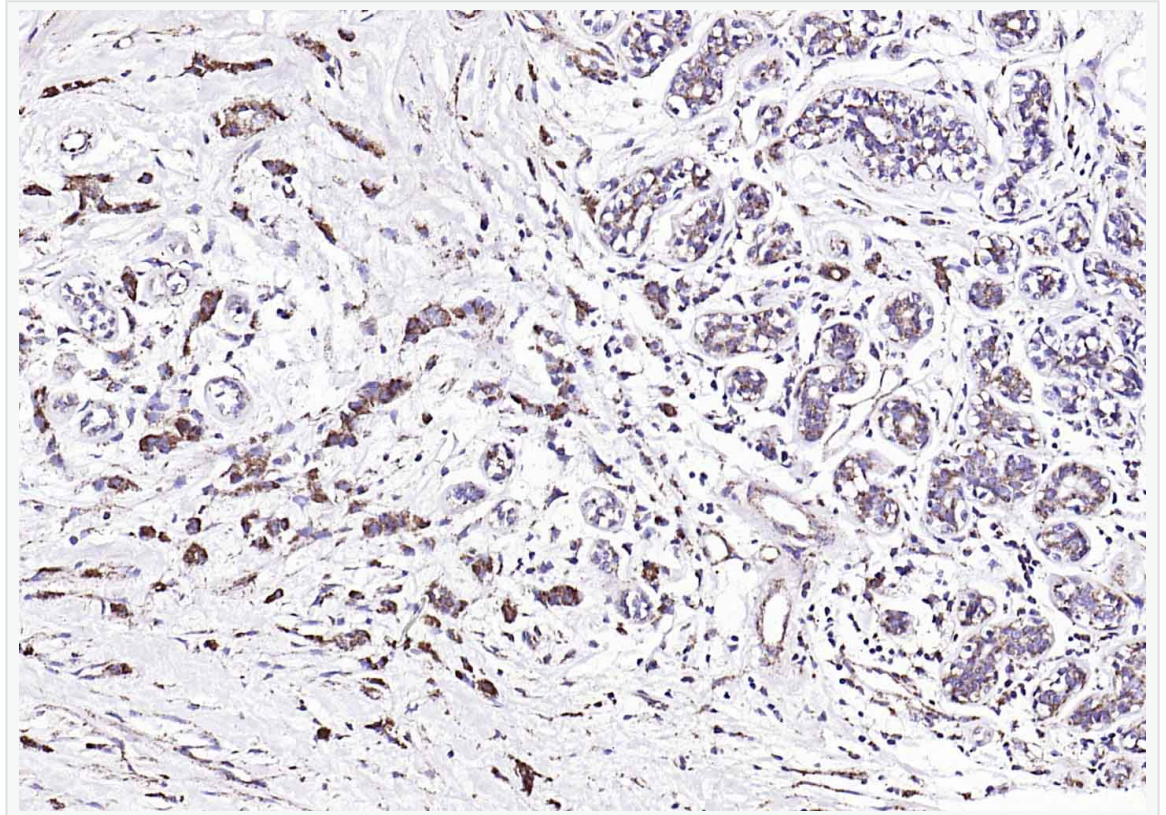
Primary:

Anti-Angiopoietin-1 (SL0800R) at 1/1000 dilution

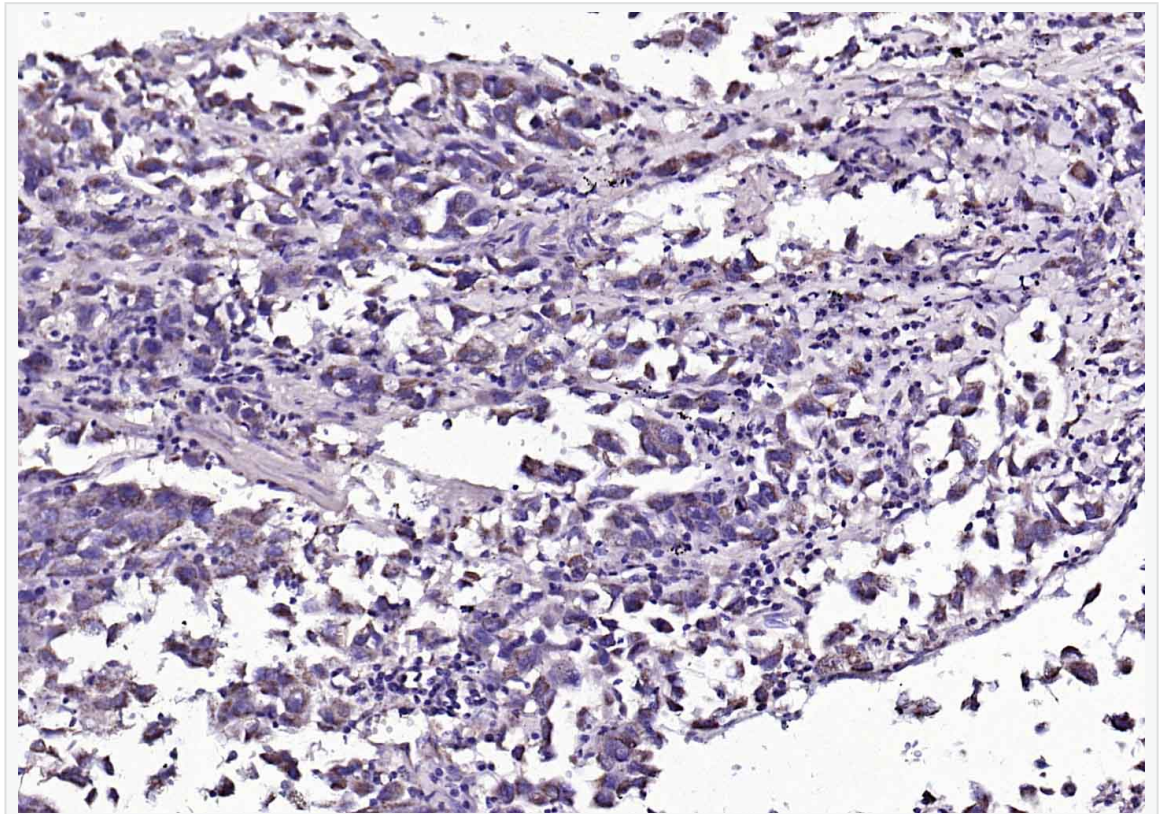
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 60 kD

Observed band size: 60 kD

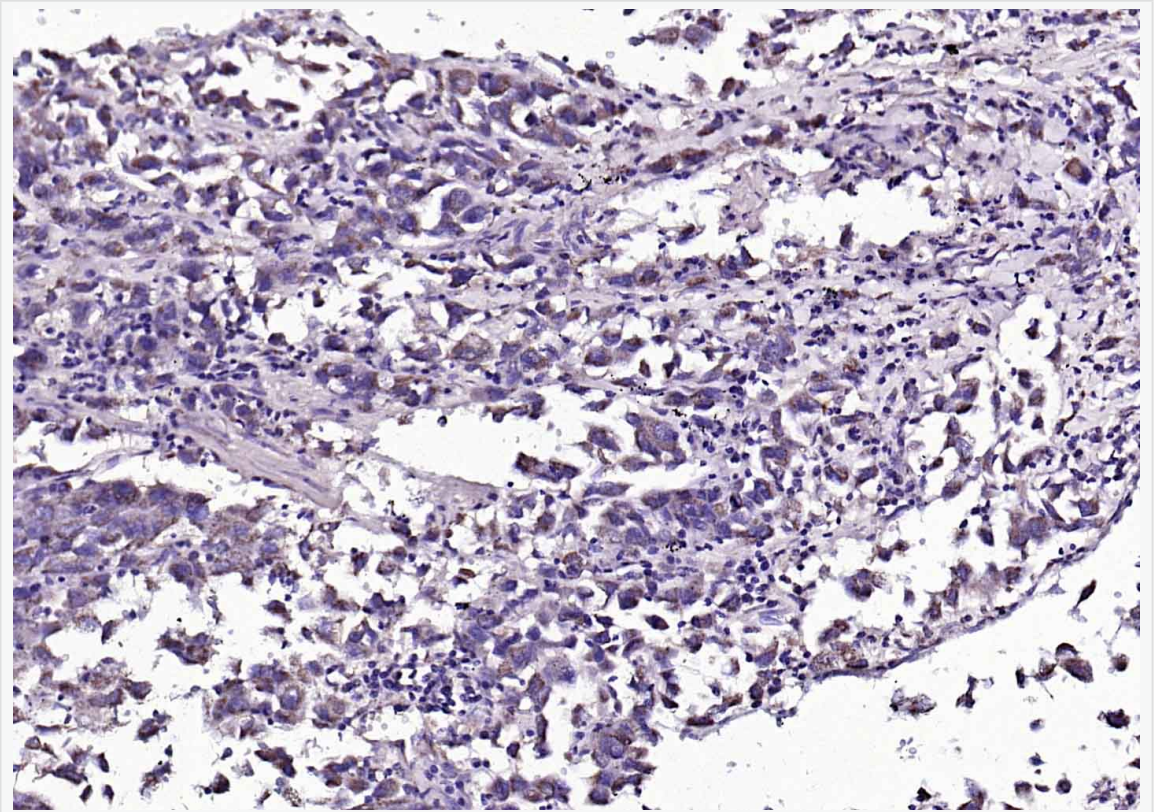


Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Angiopoietin-1) Polyclonal Antibody, Unconjugated (SL0800R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

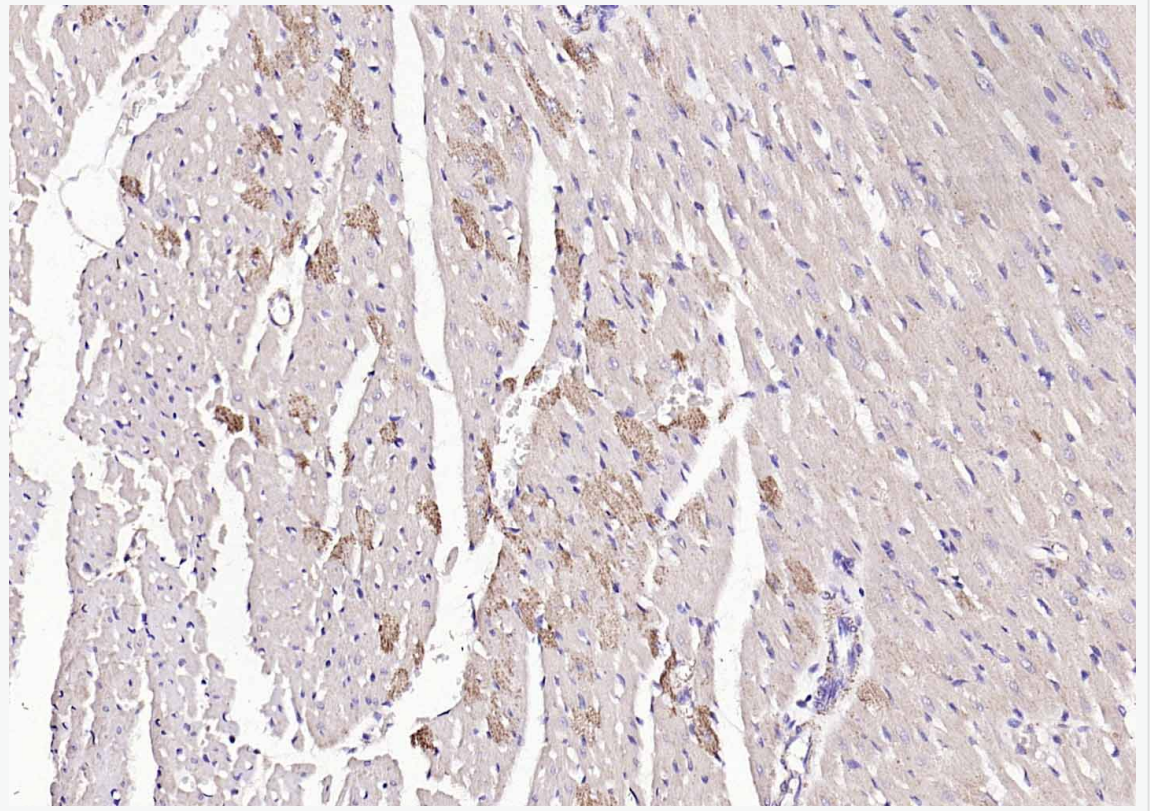


Paraformaldehyde-fixed, paraffin embedded (human lung carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat

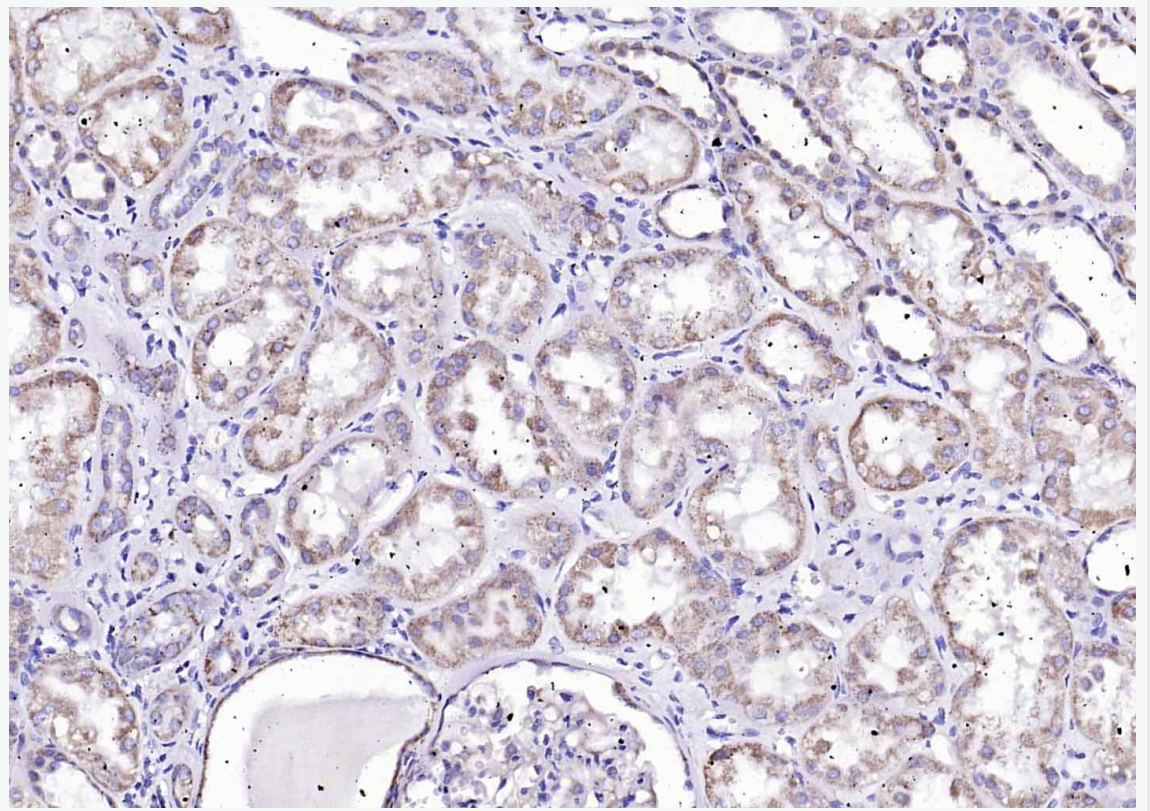
serum) at 37°C for 30min; Antibody incubation with (Angiopoietin-1) Polyclonal Antibody, Unconjugated (SL0800R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



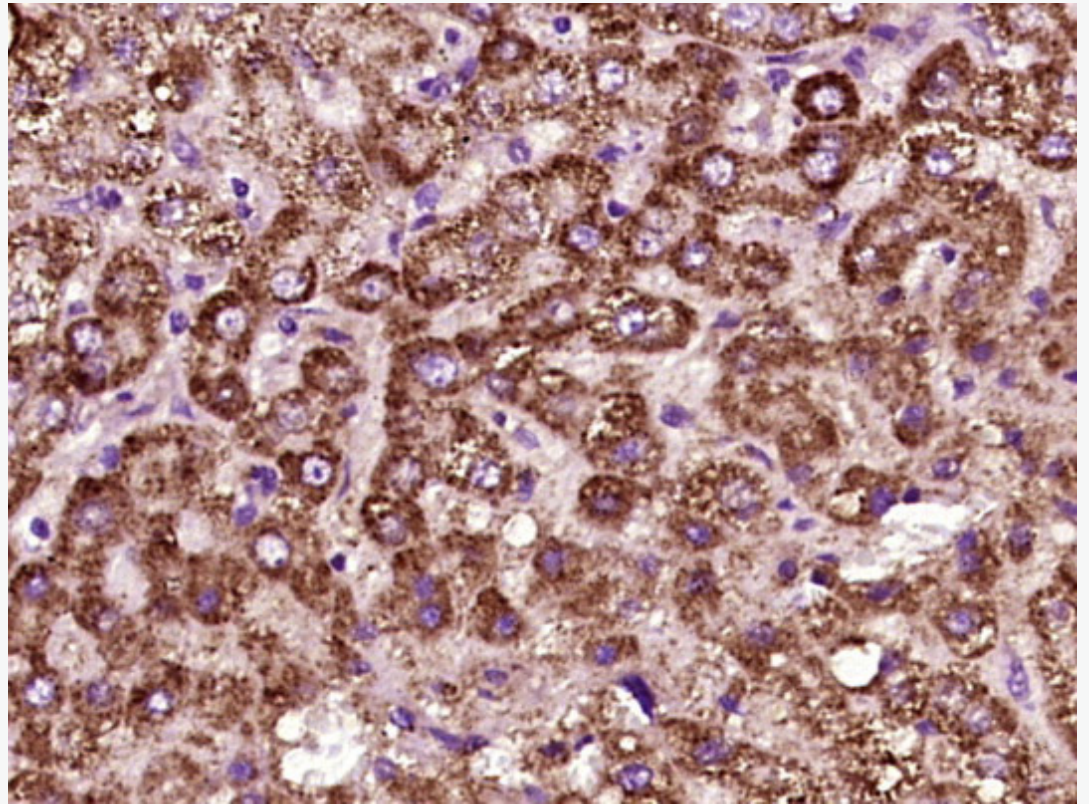
Paraformaldehyde-fixed, paraffin embedded (human lung carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Angiopoietin-1) Polyclonal Antibody, Unconjugated (SL0800R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



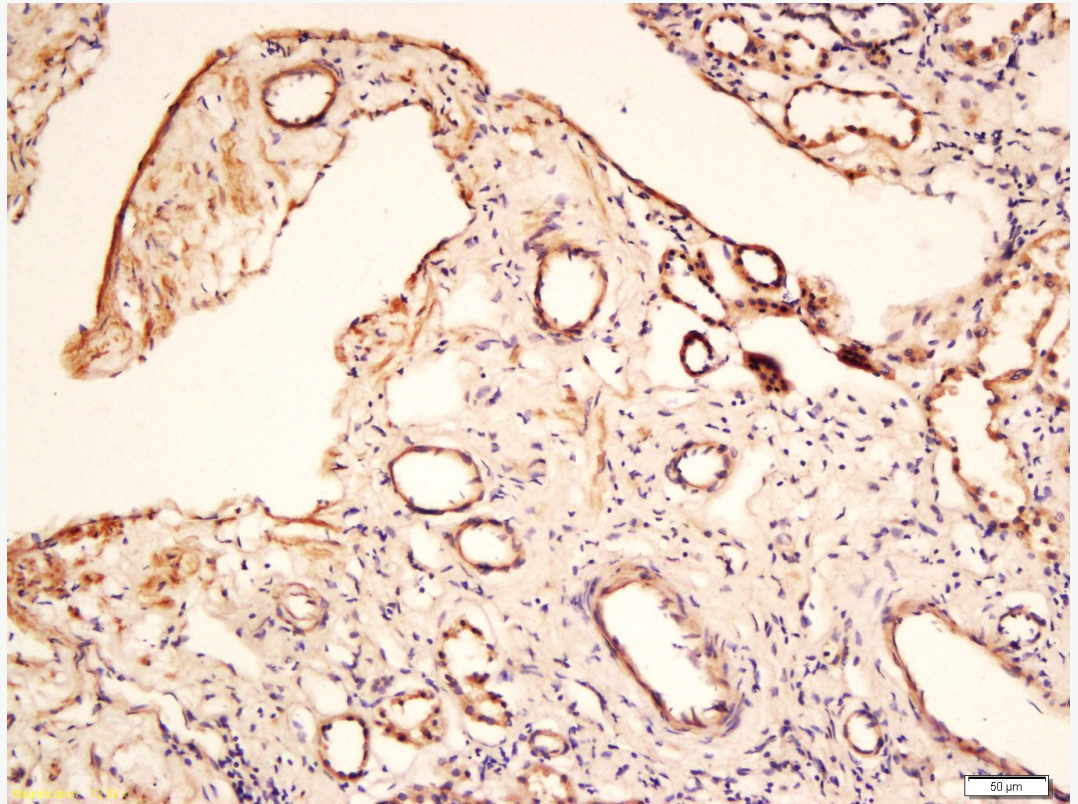
Paraformaldehyde-fixed, paraffin embedded (rat heart); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Angiopoietin-1) Polyclonal Antibody, Unconjugated (SL0800R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human 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 (Angiotensin-1) Polyclonal Antibody, Unconjugated (SL0800R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

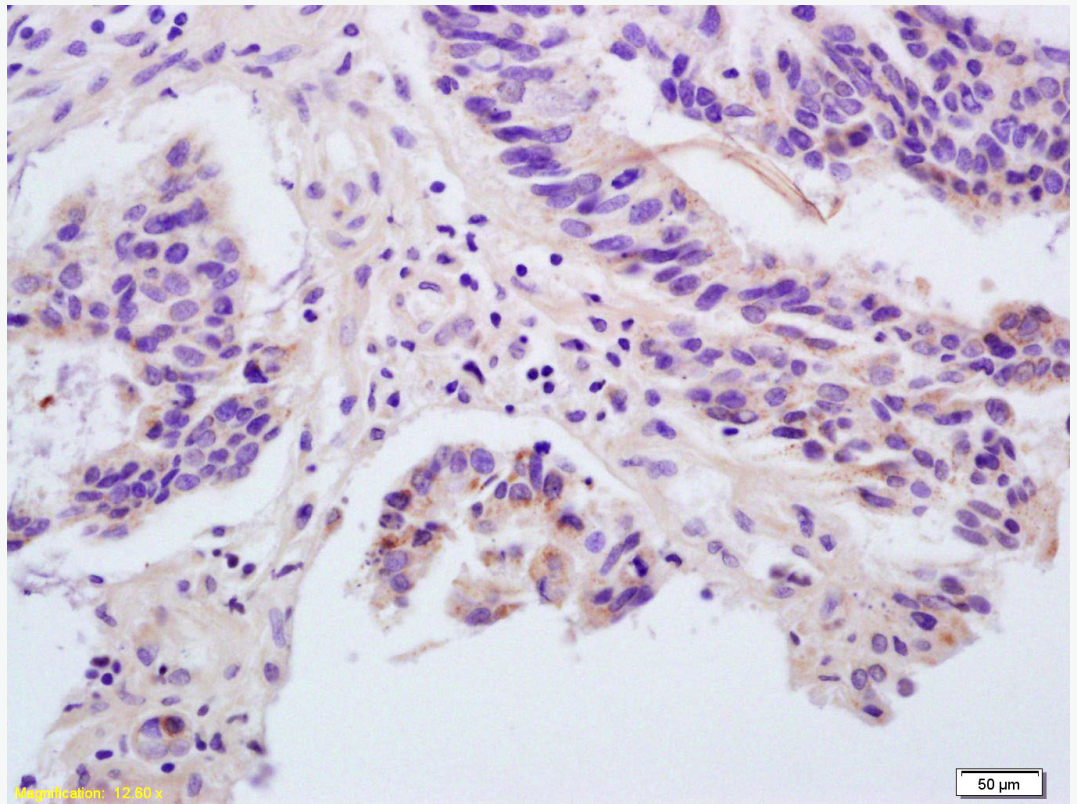


Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GRP94) Polyclonal Antibody, Unconjugated (SL0194R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: human kidney 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-AGP 1 Polyclonal Antibody, Unconjugated(SL0800R) 1:400,  
overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and  
DAB(C-0010) staining

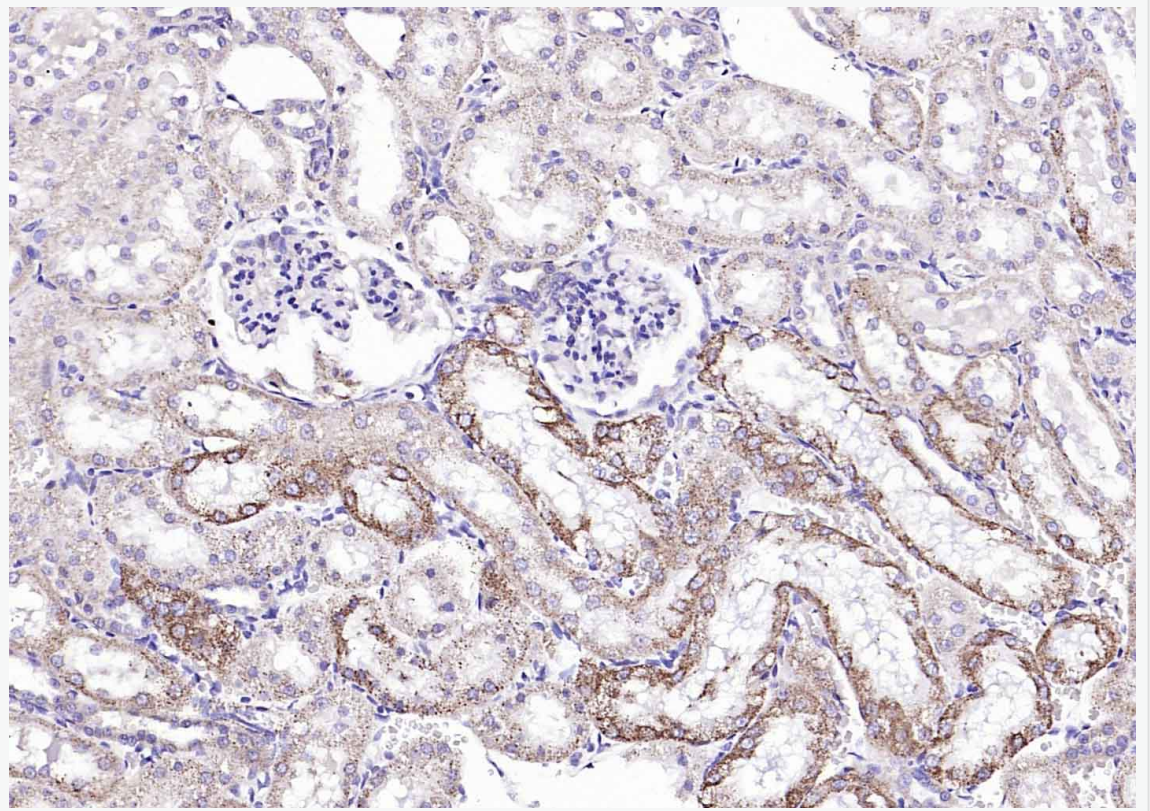


Tissue/cell: human rectal carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

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-ANGPTL1/Angiopoietin 1/ANG-1 Polyclonal Antibody,

Unconjugated(SL0800R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



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 (Angiotensin-1) Polyclonal Antibody, Unconjugated (SL0800R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.