

**Anti-Angiopoietin 2 (RABBIT) Antibody**  
**Angiopoietin 2 Antibody**  
**Catalog # ASR3693****Specification**

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**Anti-Angiopoietin 2 (RABBIT) Antibody - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Target Species	Mouse
Reactivity	Human, Mouse
Clonality	Polyclonal
Application	WB, IHC, E, IP, I, LCI
Application Note	Angiopoietin 2 Antibody is tested in WB, ICC, and IHC. Angiopoietin 2 Antibody is suitable for western blotting and other antibody based assays. A 1:500 dilution is recommended for western blotting. Both Ang-1 and Ang-2 proteins have predicted molecular weights of approximately 57 kDa and appear on western blots close to their predicted molecular weights. In some instances additional bands may be seen at approximately 75 kDa which represent highly glycosylated forms of the protein that migrate at a higher apparent molecular weight. The reaction of this antiserum directly with cell supernatants may result in high background due to reactivity of components in the serum. This can be alleviated by first immunoprecipitating the antibody:antigen complex and then detecting the antigen. This method results in a very clean, strong signal.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Anti-Angiopoietin 2 Antiserum was prepared by repeated immunizations with a synthetic peptide, corresponding to a region near the N-terminus of mouse angiopoietin-2 protein, conjugated to KLH using maleimide.
Preservative	0.1% (w/v) Sodium Azide

**Anti-Angiopoietin 2 (RABBIT) Antibody - Additional Information****Gene ID 11601****Other Names**

11601

**Purity**

Angiopoietin 2 Antibody antiserum is directed against mouse angiopoietin-2 and shows no reactivity with angiopoietin-1 from mouse-derived proteins. This product was prepared from monospecific antiserum by a delipidation and defibrination. This reagent cross-reacts with human angiopoietin-2. Partially cross-reactivity is noted with human angiopoietin-1.

**Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

**Anti-Angiopoietin 2 (RABBIT) Antibody - Protein Information****Name** Angpt2**Synonyms** Agpt2**Function**

Binds to TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT1 signaling (By similarity). Can induce tyrosine phosphorylation of TEK/TIE2 in the absence of ANGPT1 (By similarity). In the absence of angiogenic inducers, such as VEGF, ANGPT2-mediated loosening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression (By similarity). In concert with VEGF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal (By similarity). Involved in the regulation of lymphangiogenesis (PubMed:<a href="http://www.uniprot.org/citations/28179430" target="\_blank">28179430</a>, PubMed:<a href="http://www.uniprot.org/citations/32908006" target="\_blank">32908006</a>).

**Cellular Location**

Secreted {ECO:0000250|UniProtKB:O15123}.

**Tissue Location**

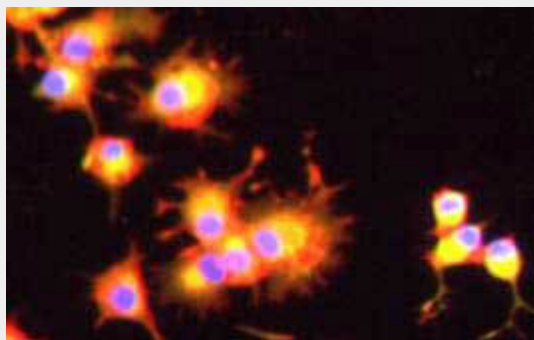
Expressed in the ovary, uterus and placenta.

**Anti-Angiopoietin 2 (RABBIT) Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Angiopoietin 2 (RABBIT) Antibody - Images**



Immunocytochemistry of anti-ANG2 Antibody in PC12 cells. Tissue: Human prostate cancer cell line (PC12). Fixation: 5 min in 100% methanol. Antigen Retrieval/permeabilization: 1hr 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween. Primary antibody: 1:200 dilution overnight at +4°C . Secondary Antibody: Gt anti-rabbit 488 at 1:1000 for 1 hr RT. Staining: Ang2 stained yellow, plasma membranes stained red, cell nuclei stained blue/purple with DAPI (1.43  $\mu$ M).

#### **Anti-Angiopoietin 2 (RABBIT) Antibody - Background**

Anti-Angiopoietin-2 Antibody recognizes Angiopoietin-2 (Ang-2) which has importance in development of the endothelium through regulation of tyrosine phosphorylation of the membrane receptor Tie-2/Tek. Ang-1 binding to Tie-2/Tek causes phosphorylation of the receptor. Ang-2 competes for this binding and thus blocks receptor phosphorylation. Ang-2 expression occurs at sites of vascular remodeling: dorsal aorta and major aortic branches, ovary, placenta and uterus. This antibody is suitable for cardiovascular research.