

**Anti-Angiopoietin-2 Picoband Antibody**  
**Catalog # ABO10067****Specification**

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**Anti-Angiopoietin-2 Picoband Antibody - Product Information**

Application	WB, IHC-P, E
Primary Accession	<a href="#">O15123</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Angiopoietin-2(ANGPT2) detection. Tested with WB, IHC-P, ELISA in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Angiopoietin-2 Picoband Antibody - Additional Information**

**Gene ID** 285

**Other Names**

Angiopoietin-2, ANG-2, ANGPT2

**Calculated MW**

56919 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br> <br>ELISA , 0.1-0.5 µg/ml, Human, -<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Secreted.

**Protein Name**

Angiopoietin-2

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

E. coli-derived human Angiopoietin-2 recombinant protein (Position: E180-D283). Human Angiopoietin-2 shares 75% and 77.9% amino acid (aa) sequence identity with mouse and rat Angiopoietin-2, respectively.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-Angiopoietin-2 Picoband Antibody - Protein Information****Name** ANGPT2**Function**

Binds to TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT1 signaling (PubMed: [15284220](http://www.uniprot.org/citations/15284220), PubMed: [19116766](http://www.uniprot.org/citations/19116766), PubMed: [19223473](http://www.uniprot.org/citations/19223473), PubMed: [9204896](http://www.uniprot.org/citations/9204896)). Can induce tyrosine phosphorylation of TEK/TIE2 in the absence of ANGPT1 (PubMed: [15284220](http://www.uniprot.org/citations/15284220), PubMed: [19116766](http://www.uniprot.org/citations/19116766), PubMed: [19223473](http://www.uniprot.org/citations/19223473), PubMed: [9204896](http://www.uniprot.org/citations/9204896)). 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. In concert with VEGF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal (PubMed: [15284220](http://www.uniprot.org/citations/15284220), PubMed: [19116766](http://www.uniprot.org/citations/19116766), PubMed: [19223473](http://www.uniprot.org/citations/19223473), PubMed: [9204896](http://www.uniprot.org/citations/9204896)). Involved in the regulation of lymphangiogenesis (PubMed: [32908006](http://www.uniprot.org/citations/32908006)).

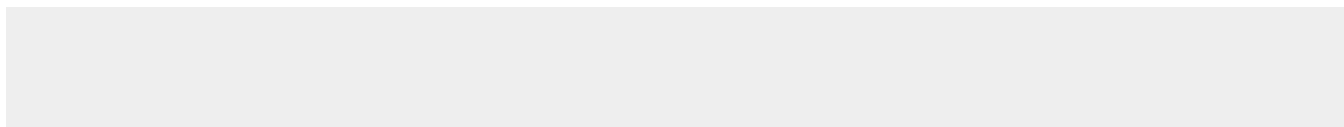
**Cellular Location**

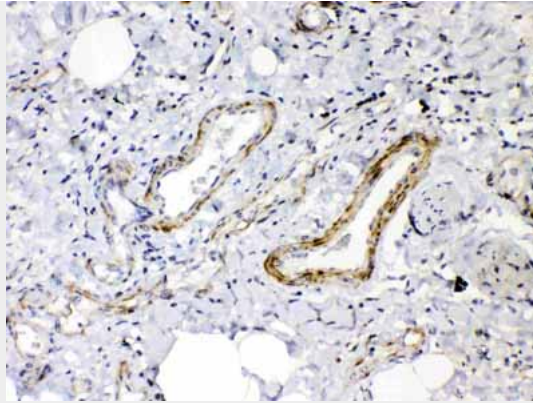
Secreted.

**Anti-Angiopoietin-2 Picoband Antibody - Protocols**

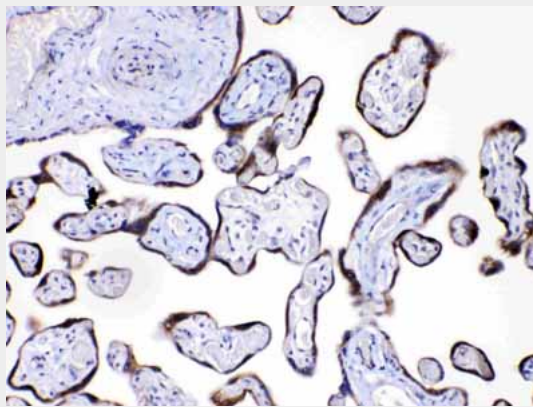
Provided below are standard protocols that you may find useful for product applications.

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

**Anti-Angiopoietin-2 Picoband Antibody - Images**



Angiopoietin-2 was detected in paraffin-embedded sections of human lung cancer tissues using rabbit anti- Angiopoietin-2 Antigen Affinity purified polyclonal antibody (Catalog # ABO10067) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .



Angiopoietin-2 was detected in paraffin-embedded sections of human placenta tissues using rabbit anti- Angiopoietin-2 Antigen Affinity purified polyclonal antibody (Catalog # ABO10067) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .

#### **Anti-Angiopoietin-2 Picoband Antibody - Background**

ANGPT2, also known as ANG2 or Angiopoietin 2, is a protein that in humans is encoded by the ANGPT2 gene. It is mapped to 8p23.1. ANGPT2 is a naturally occurring antagonist of ANG1 that competes for binding to the TIE2 receptor and blocks ANGPT1-induced TIE2 autophosphorylation during vasculogenesis. The encoded protein disrupts the vascular remodeling ability of ANGPT1 and may induce endothelial cell apoptosis. ANGPT2 was significantly increased in plasma and alveolar edema fluid in adults with acute lung injury compared to controls or patients with hydrostatic pulmonary edema, tracheal. ANGPT2 was also significantly increased in neonates with respiratory distress syndrome who developed bronchopulmonary edema. It is also a mediator of epithelial necrosis with an important role in hyperoxic acute lung injury and pulmonary edema.