

Anti-Angiopoietin-2 Antibody
Catalog # ABO10500**Specification**

Anti-Angiopoietin-2 Antibody - Product Information

Application	WB
Primary Accession	O15123
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

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

Reconstitution

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

Anti-Angiopoietin-2 Antibody - Additional Information

Gene ID 285

Other Names

Angiopoietin-2, ANG-2, ANGPT2

Calculated MW

56919 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Secreted.

Protein Name

Angiopoietin-2(ANG-2)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Angiopoietin 2(454-468aa NLNGMYYPQRQNTNK).

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.

Sequence Similarities

Contains 1 fibrinogen C-terminal domain.

Anti-Angiopoietin-2 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)).

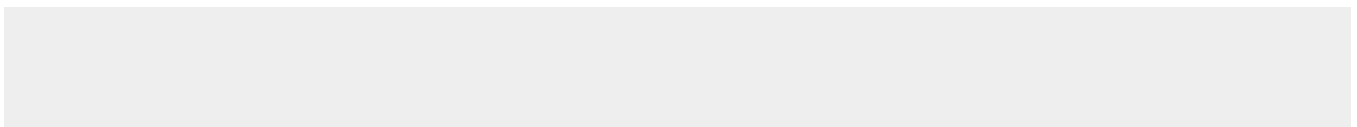
Cellular Location

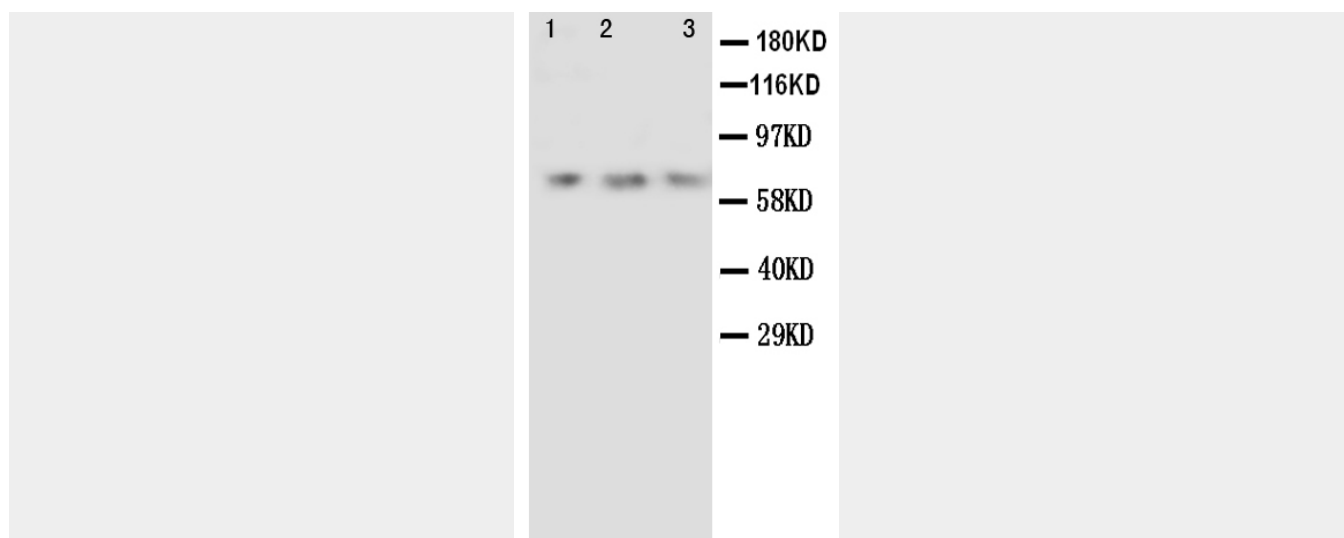
Secreted.

Anti-Angiopoietin-2 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 Antibody - Images



Anti-Angiopoietin 2 antibody, ABO10500, Western blotting
Lane 1: Recombinant Human ANG2 Protein 10ng
Lane 2: Recombinant Human ANG2 Protein 5ng
Lane 3: Recombinant Human ANG2 Protein 2.5ng

Anti-Angiopoietin-2 Antibody - Background

Angiopoietin 1 and Angiopoietin 2 are important for development of the endothelium, by regulating tyrosine phosphorylation of the membrane receptor Tie 2. Angiopoietin 2 is only 60% homologous with Angiopoietin 1. Angiopoietin-2 is a naturally occurring antagonist of angiopoietin-1 that competes for binding to the TIE2 receptor and blocks ANGPT1-induced TIE2 autophosphorylation. Angiopoietin 1 binding to Tie 2 causes phosphorylation of the receptor. Angiopoietin 2 competes for this binding, and thus blocks receptor phosphorylation. Angiopoietin 2 expression occurs at sites of vascular remodelling: dorsal aorta and major aortic branches, ovary, placenta and uterus.