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Anti-Angiopoietin-2 Antibody

Catalog # ABO12722

Specification

Anti-Angiopoietin-2 Antibody - Product Information

Application	**IHC-P**
Primary Accession	O15123
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Angiopoietin-2(ANGPT2) detection. Tested with IHC-P in Human;Mouse;Rat.

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
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

Subcellular Localization
Secreted.

Protein Name
Angiopoietin-2

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

Immunogen
E.coli-derived human Angiopoietin 2 recombinant protein (Position: Y19-N348). Human Angiopoietin 2 shares 84% and 85% amino acid (aa) sequences 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 r˚Constitution, 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, PubMed:19116766, PubMed:19223473, PubMed:9204896). Can induce tyrosine phosphorylation of TEK/TIE2 in the absence of ANGPT1 (PubMed:15284220, PubMed:19116766, PubMed:19223473, PubMed: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, PubMed:19116766, PubMed:19223473, PubMed:9204896). Involved in the regulation of lymphangiogenesis (PubMed:32908006).

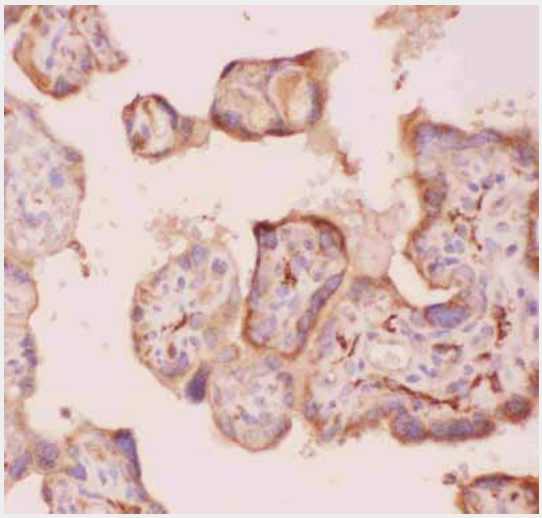
Cellular Location
Secreted.

Anti-Angiopoietin-2 Antibody - Protocols

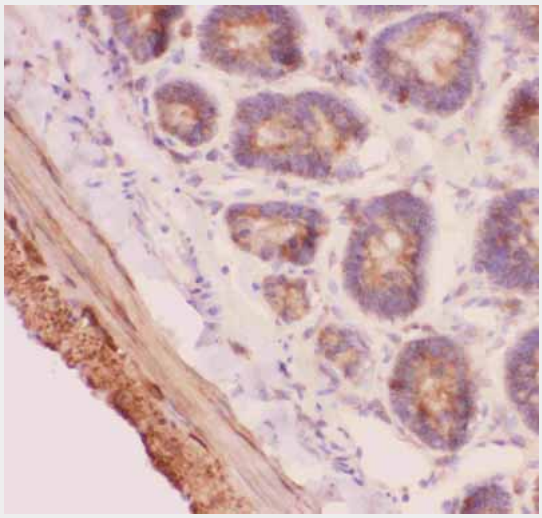
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

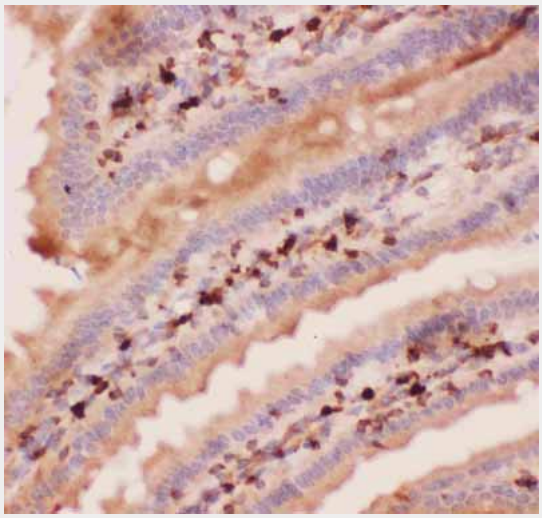
Anti-Angiopoietin-2 Antibody - Images



Anti-Angiopoietin 2 Picoband antibody, ABO12722-1.JPGIHC(P): Human Placenta Tissue



Anti-Angiopoietin 2 Picoband antibody, ABO12722-2.JPGIHC(P): Rat Intestine Tissue



Anti-Angiopoietin 2 Picoband antibody, ABO12722-3.JPGIHC(P): Mouse Intestine Tissue

Anti-Angiopoietin-2 Antibody - Background

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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.