10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Angiopoietin-2 Antibody

Catalog # ABO12722

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.

Additional Information

Gene ID	285
Other Names	Angiopoietin-2, ANG-2, ANGPT2
Calculated MW	56919
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat
Subcellular Localization	Secreted.
Source	Eukaryota
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.

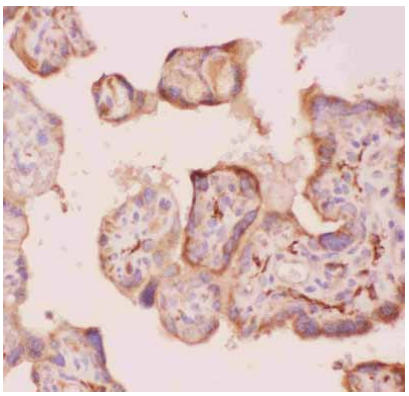
Protein Information

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.

Background

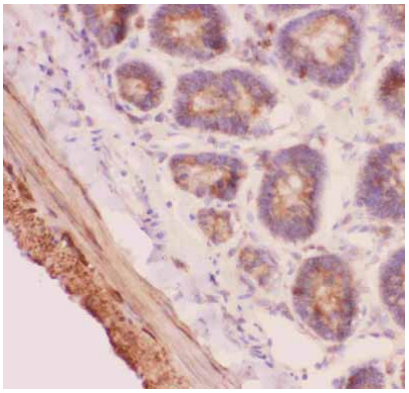
ANGPT2, also known as ANG2 or Angiopoietin 2, is a protein that in humans is encoded by the ANGPT2 gene. It is mapped to 8p23.1. ANGPT2 is a naturally occurring antagonist of ANG1 that competes for binding to the TIE2 receptor and blocks ANGPT1-induced TIE2 autophosphorylation during vasculogenesis. 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.

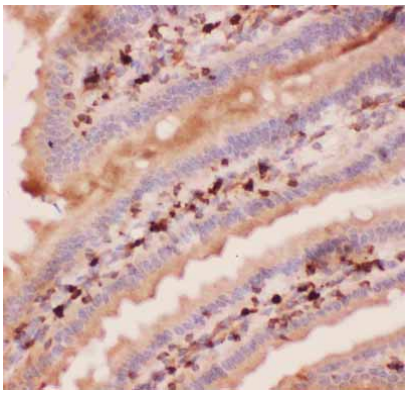
Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.