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Anti-Angiopoietin-2 Antibody

Catalog # ABO10500

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.

Additional Information

Gene ID	285
Other Names	Angiopoietin-2, ANG-2, ANGPT2
Calculated MW	56919
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Secreted.
Source	Eukaryota
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 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.

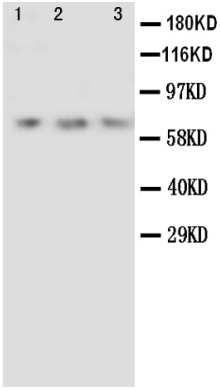
Protein Information

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

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.

Images



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

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