

ANGPT2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10103b

Specification

ANGPT2 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB, IHC-P, FC,E <u>O15123</u> <u>NP_001138.1</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 404-432

ANGPT2 Antibody (C-term) - Additional Information

Gene ID 285

Other Names Angiopoietin-2, ANG-2, ANGPT2

Target/Specificity This ANGPT2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 404-432 amino acids from the C-terminal region of human ANGPT2.

Dilution WB~~1:2000 IHC-P~~1:50~100 FC~~1:25 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ANGPT2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ANGPT2 Antibody (C-term) - Protein Information

Name ANGPT2



Function Binds to TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT1 signaling (PubMed:<u>15284220</u>, PubMed:<u>19116766</u>, PubMed:<u>19223473</u>, PubMed:<u>9204896</u>). Can induce tyrosine phosphorylation of TEK/TIE2 in the absence of ANGPT1 (PubMed:<u>15284220</u>, PubMed:<u>19116766</u>, PubMed:<u>19223473</u>, PubMed:<u>9204896</u>). 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:<u>15284220</u>, PubMed:<u>19116766</u>, PubMed:<u>19223473</u>, PubMed:<u>19223473</u>, PubMed:<u>9204896</u>). Involved in the regulation of lymphangiogenesis (PubMed:<u>32908006</u>).

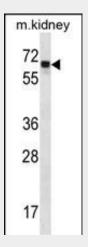
Cellular Location Secreted.

ANGPT2 Antibody (C-term) - Protocols

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

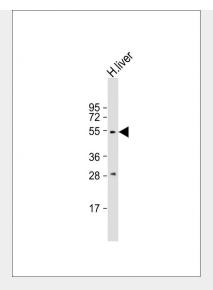
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ANGPT2 Antibody (C-term) - Images

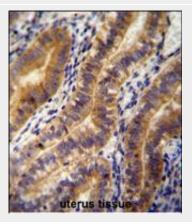


ANGPT2 Antibody (C-term) (Cat. #AP10103b) western blot analysis in mouse kidney tissue lysates (35ug/lane). This demonstrates the ANGPT2 antibody detected the ANGPT2 protein (arrow).

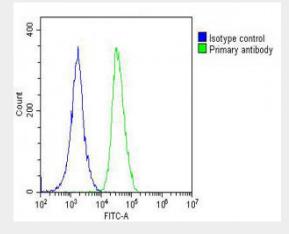




Anti-ANGPT2 Antibody (C-term) at 1:2000 dilution + human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 57 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



ANGPT2 antibody (C-term) (Cat. #AP10103b) immunohistochemistry analysis in formalin fixed and paraffin embedded human uterus tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ANGPT2 antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



Overlay histogram showing A549 cells stained with AP10103b (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein



interactions followed by the antibody (AP10103b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

ANGPT2 Antibody (C-term) - Background

The protein encoded by this gene is an antagonist of angiopoietin 1 (ANGPT1) and endothelial TEK tyrosine kinase (TIE-2, TEK). The encoded protein disrupts the vascular remodeling ability of ANGPT1 and may induce endothelial cell apoptosis. Three transcript variants encoding three different isoforms have been found for this gene.

ANGPT2 Antibody (C-term) - References

Morrissey, C., et al. Prostate 70(16):1799-1808(2010) Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010) : Bento, C.F., et al. Exp. Physiol. 95(9):955-970(2010) Vrbacky, F., et al. Hematology 15(4):210-214(2010) Chen, J., et al. Biochem. Biophys. Res. Commun. 398(2):212-216(2010) ANGPT2 Antibody (C-term) - Citations

- Higher metastatic efficiency of KRas G12V than KRas G13D in a colorectal cancer model.
- Subcutaneous preconditioning increases invasion and metastatic dissemination in mouse colorectal cancer models.