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Datasheet for 100-401-402

Angiopoietin 2 Antibody

Overview

Description:	Anti-Angiopoietin 2 (RABBIT) Antibody - 100-401-402
Item No.:	100-401-402
Size:	200 µL
Applications:	IHC, Multiplex, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	Anti-Antiopoietin-2 Antibody recognizes Angiopoietin-2 (Ang-2) which has importance in development of the endothelium through regulation of tyrosine phosphorylation of the membrane receptor Tie-2/Tek. Ang-1 binding to Tie-2/Tek causes phosphorylation of the receptor. Ang-2 competes for this binding and thus blocks receptor phosphorylation. Ang-2 expression occurs at sites of vascular remodeling: dorsal aorta and major aortic branches, ovary, placenta and uterus. This antibody is suitable for cardiovascular research.
Synonyms:	rabbit anti-Angiopoietin 2 Antibody, rabbit anti-ANG2 antibody, AGPT 2 antibody, Agpt2 antibody, ANG 2 antibody, ANG2 antibody, Angiopoietin 2a antibody, Angiopoietin 2B antibody, Angiopoietin2 antibody, ANGPT 2 antibody, ANGPT2 antibody, Tie2 ligand antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	Angpt2
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Angiopoietin 2 Antiserum was prepared by repeated immunizations with a synthetic peptide, corresponding to a region near the N-terminus of mouse angiopoietin-2 protein, conjugated to KLH using maleimide.

Purity/Specificity:	Angiopoietin 2 Antibody antiserum is directed against mouse angiopoietin-2 and shows no reactivity with angiopoietin-1 from mouse-derived proteins. This product was prepared from monospecific antiserum by a delipidation and defibrination. This reagent cross-reacts with human angiopoietin-2. Partially cross-reactivity is noted with human angiopoietin-1.
Relevant Links:	• UniProtKB - O35608 • NCBI - NP_031452.2 • GeneID - 11601

Application Details

Tested Applications:	IHC, Multiplex, WB
Application Note:	Angiopoietin 2 Antibody is tested in WB, ICC, and IHC. Angiopoietin 2 Antibody is suitable for western blotting and other antibody based assays. A 1:500 dilution is recommended for western blotting. Both Ang-1 and Ang-2 proteins have predicted molecular weights of approximately 57 kDa and appear on western blots close to their predicted molecular weights. In some instances additional bands may be seen at approximately 75 kDa which represent highly glycosylated forms of the protein that migrate at a higher apparent molecular weight. The reaction of this antiserum directly with cell supernatants may result in high background due to reactivity of components in the serum. This can be alleviated by first immunoprecipitating the antibody:antigen complex and then detecting the antigen. This method results in a very clean, strong signal.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:25,000
IHC:	1:200-1:500
IP:	User Optimized
WB:	1:500 - 1:2,000

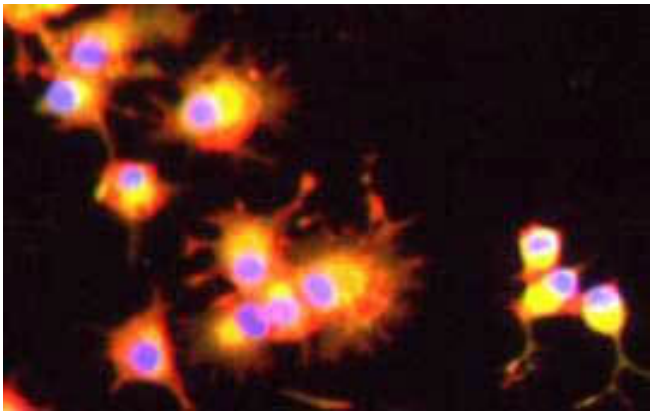
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	85 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.1% (w/v) Sodium Azide
Stabilizer:	None

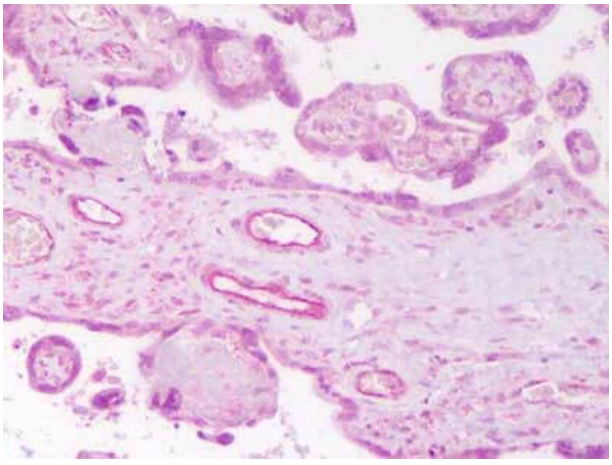
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

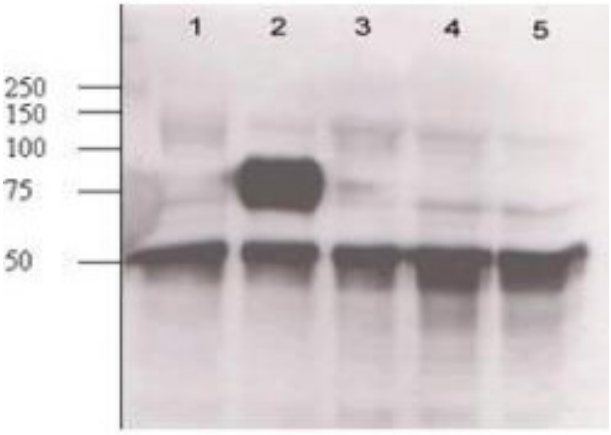
Images



Immunocytochemistry
Immunocytochemistry of anti-ANG2 Antibody in PC12 cells. Tissue: Human prostate cancer cell line (PC12). Fixation: 5 min in 100% methanol. Antigen Retrieval/permeabilization: 1hr 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween. Primary antibody: 1:200 dilution overnight at +4°C . Secondary Antibody: Gt anti-rabbit 488 at 1:1000 for 1 hr RT. Staining: Ang2 stained yellow, plasma membranes stained red, cell nuclei stained blue/purple with DAPI (1.43 µM).



Immunohistochemistry
Immunohistochemistry of anti-ANG2 Antibody. Tissue: human placenta. Fixation: FFPE buffered formalin 10% conc. Ag Retrieval: Heat, Citrate pH 6.2. Pressure Cooker. Primary antibody: 2ug/ml for 1.5 hour @ room Temp. Secondary Ab: mouse anti-rat 1:50 45" RT.



Western Blot
Immunoprecipitation/Western Blot of Anti-Angiopoietin 2. Immunoprecipitation preceded primary antibody Rabbit anti-Ang-2 at a 1:500 dilution at room temperature for 1 h to detect mouse Ang-2 in supernatants of mouse-angiopoietin-expressing endothelial cells. Lane 1 - mock endothelial cells. Lane 2 - mouse Ang-2 (clone 2-9) expressing cells. Lane 3 - mouse Ang-1 (clone 1-15) expressing cells. Lane 4 - mouse Ang-1 (clone 1-8) expressing cells. Lane 5 - wt endothelial cells. Load: 20 µg of each lysate was loaded for 10% SDS-PAGE. Secondary Antibody: HRP conjugated Gt-a-Rabbit IgG (611-103-122) at 1:5,000 dilution preceded color development.

References

- Williams JL et al. Differential gene and protein expression in abluminal sprouting and intraluminal splitting forms of angiogenesis *Clin Sci (Lond).* (2006)

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