

Datasheet for 100-401-402S**Angiopoietin 2 Antibody****Overview**

Description:	Anti-Angiopoietin 2 (RABBIT) Antibody - 100-401-402S
Item No.:	100-401-402S
Size:	25 µL
Applications:	IHC, Multiplex, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	Anti-Angiopoietin-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:

- [NCBI - NP_031452.2](#)
- [UniProtKB - O35608](#)
- [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

WB: 1:500 - 1:2,000

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 80 mg/ml by Refractometry

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

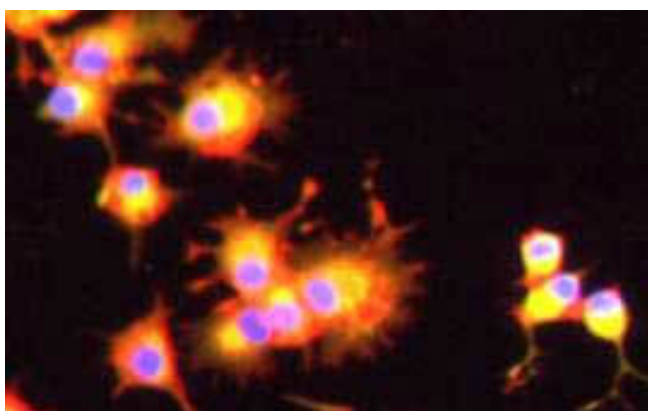
Preservative: 0.1% (w/v) Sodium Azide

Stabilizer: None

Shipping & Handling

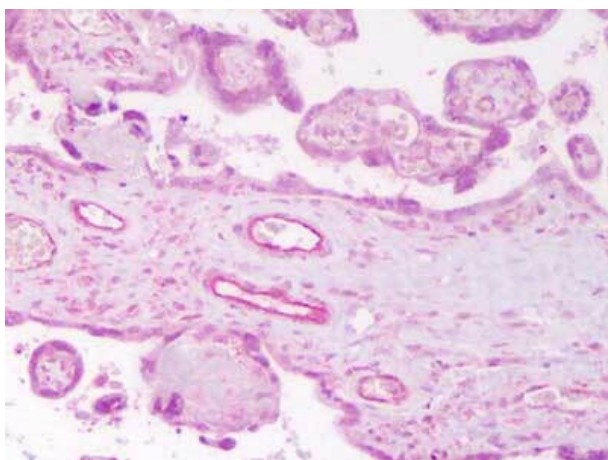
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



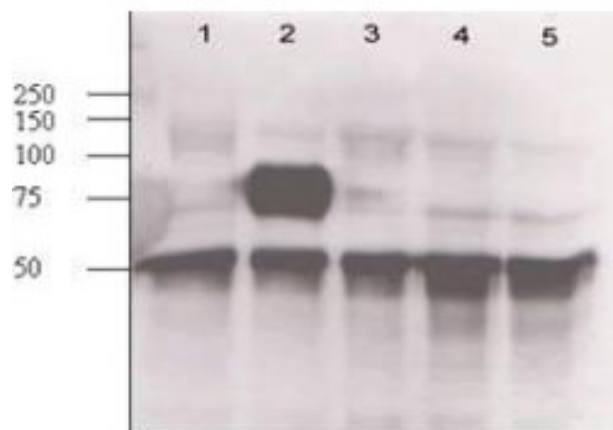
Immunocytochemistry

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.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.