

Datasheet for ABIN95109

anti-Angiopoietin 1 antibody (AA 15-45)

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Overview

Quantity:	200 µL
Target:	Angiopoietin 1 (ANGPT1)
Binding Specificity:	AA 15-45
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Angiopoietin 1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunoprecipitation (IP), Immunofluorescence (IF)

Product Details

Purpose:	Angiopoietin 1 Antibody
Immunogen:	Immunogen: This whole rabbit serum was prepared by repeated immunizations with a synthetic peptide corresponding to a N-terminus region near aa 15-45 of mouse angiopoietin 1 protein conjugated to KLH using maleimide. A residue of cysteine was added to the amino terminal end to facilitate coupling. Immunogen Type: Conjugated Peptide
Cross-Reactivity (Details):	Anti-Angiopoietin 1 is directed against mouse angiopoietin-1 and shows no reactivity with mouse angiopoietin-2. This reagent cross-reacts with human angiopoietin 1.
Characteristics:	Synonyms: rabbit anti-Angiopoietin 1 Antibody, rabbit anti-ANG1 antibody, AGP 1 antibody, AGP1 antibody, AGPT antibody, ANG 1 antibody, Angiopoietin1 antibody, ANGPT 1 antibody,

Product Details

ANGPT1 antibody, KIAA0003 antibody

Sterility: Sterile filtered

Target Details

Target: Angiotensin 1 (ANGPT1)

Alternative Name: Angpt1 ([ANGPT1 Products](#))

Background: Background: Anti-Angiotensin-1 Antibody, which recognizes Angiotensin-1 (Ang-1), has importance in the development of the endothelium by regulating 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-1 has a potential fibrinogen-like domain at the carboxyl terminus and coiled-coil regions in the amino terminus. Ang-1 is prominently expressed in the myocardium of atrium and ventricle, mesenchymal and smooth muscle cells surrounding most blood vessels, and lung. In the adult, Ang-1 is also expressed in the heart and liver. Anti-Angiotensin-1 Antiserum antibody is suitable for cardiovascular research.

Gene ID: 11600, 46048213

UniProt: [O08538](#)

Pathways: [RTK Signaling](#), [Glycosaminoglycan Metabolic Process](#)

Application Details

Application Notes: Immunohistochemistry Dilution: 1:200-1:800

Application Note: Anti-Angiotensin-1 Antiserum has been tested in ELISA, western blot, immunohistochemistry, and immunofluorescence and is suitable for other antibody based assays. A 1:500 dilution is recommended for western blotting. 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 and strong signal. 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.

Western Blot Dilution: 1:500-1:2,000

Immunoprecipitation Dilution: User Optimized

Application Details

ELISA Dilution: 1:5,000 - 1:25,000

Other: User Optimized

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 85 mg/mL

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

Stabilizer: None

Preservative: 0.01 % (w/v) Sodium Azide

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -20 °C

Storage Comment: 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.

Expiry Date: 12 months

Publications

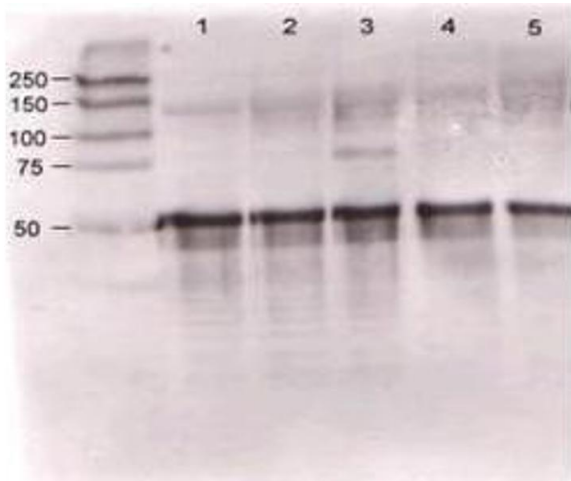
Product cited in: Egginton, Hussain, Hall-Jones, Chaudhry, Syeda, Glen: "Shear stress-induced angiogenesis in mouse muscle is independent of the vasodilator mechanism and quickly reversible." in: **Acta physiologica (Oxford, England)**, Vol. 218, Issue 3, pp. 153-166, (2017) ([PubMed](#)).

Dallabrida, Ismail, Pravda, Parodi, Dickie, Durand, Lai, Cassiola, Rogers, Rupnick: "Integrin binding angiopoietin-1 monomers reduce cardiac hypertrophy." in: **FASEB journal : official publication of the Federation of American Societies for Experimental Biology**, Vol. 22, Issue 8, pp. 3010-23, (2008) ([PubMed](#)).

Câmpean, Karpe, Haas, Atalla, Peters, Rupprecht, Liebner, Acker, Plate, Amann: "Angiopoietin 1 and 2 gene and protein expression is differentially regulated in acute anti-Thy1.1

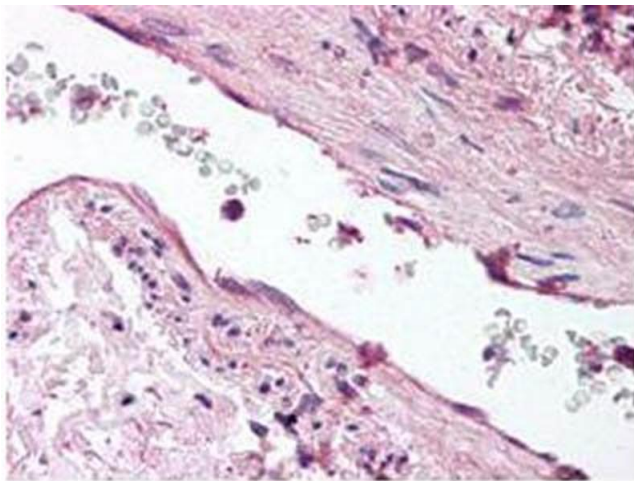
glomerulonephritis." in: **American journal of physiology. Renal physiology**, Vol. 294, Issue 5, pp. F1174-84, (2008) ([PubMed](#)).

Images



Western Blotting

Image 1. Rabbit anti-Ang-1 was used at a 1:500 dilution to detect mouse Ang-1 by western blot against supernatants of mouse angiopoietin-expressing endothelial cells. Lane 1 - wt endothelial cells. Lane 2 - mouse Ang-1 (clone 1-8) expressing cells. Lane 3 - mouse Ang-1 (clone 1-15) expressing cells. Lane 4 - mouse Ang-2 (clone 2-9) expressing cells. Approximately 20 µg of each lysate was used for 10% SDS-PAGE. Immunoprecipitation preceded the reaction with primary antibody at room temperature for 1 h. After subsequent washing, a 1:5,000 dilution of HRP conjugated Gt-a-Rabbit IgG preceded color development.



Immunohistochemistry

Image 2. anti-ANG1 antibody was diluted 1:500 to detect ANG1 in human lung tissue. Tissue was formalin fixed and paraffin embedded. No pre-treatment of sample was required. The image shows the localization of antibody as the precipitated red signal, with a hematoxylin purple nuclear counter stain.