Datasheet for ABIN95109

anti-Angiopoietin 1 antibody

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Overview

Quantity:	200 µL
Target:	Angiopoietin 1 (ANGPT1)
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Angiopoietin 1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	This whole rabbit serum was prepared by repeated immunizations with a synthetic peptide N-Q-R-R-N-P-E-N-G-G-R-R-Y-N-R-I-Q-H-G-Q corresponding to a region (aa 21-40) near the of mouse angiopoietin 1 protein conjugated to KLH using maleimide. A residue of cysteine was added to the amino terminal end to facilitate coupling.
Characteristics:	Concentration Definition: by Refractometry

Target Details

Target:	Angiopoietin 1 (ANGPT1)
Alternative Name:	Angiopoietin 1 (ANGPT1 Products)
Background:	Anti Antiopoietin-1 Antibody recognizes Angiopoietin-1 (Ang-1) that 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

Target Details

	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. Synonyms: AGP 1 antibody, AGP1 antibody, AGPT antibody, ANG 1 antibody, ANG1 antibody, Angiopoietin1 antibody, ANGPT 1 antibody, ANGPT1 antibody, KIAA0003 antibody
Gene ID:	11600, 46048213
NCBI Accession:	NP_031452
UniProt:	O08538
Pathways:	RTK Signaling, Glycosaminoglycan Metabolic Process

Application Details

Application Notes:	Suitable for western blotting, Immunohistochemistry (IHC) and 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.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	85 mg/mL
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Storage:	-20 °C

Publications

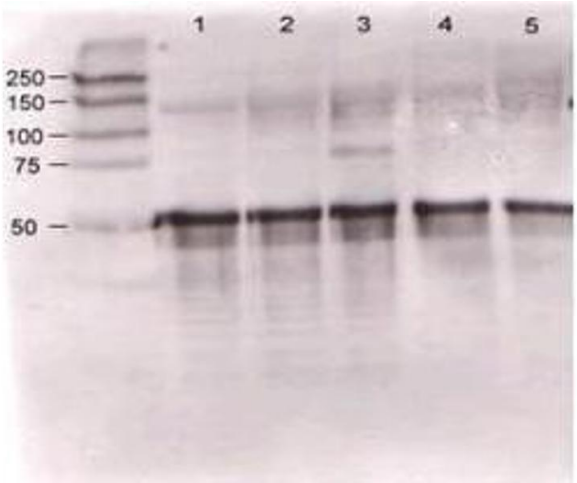
Product cited in:

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).

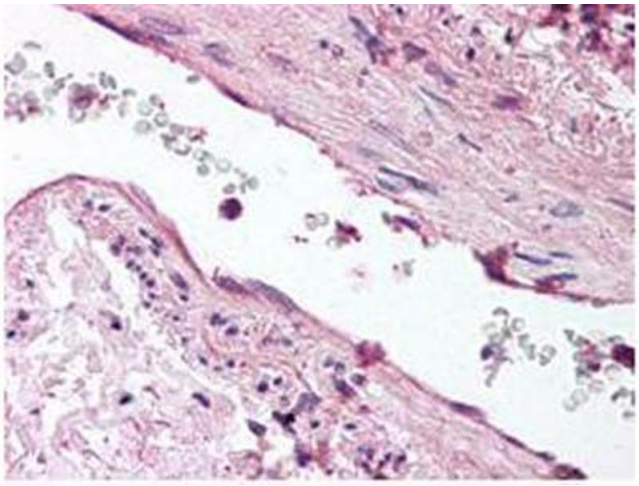
Câmpean, Karpe, Haas, Atalla, Peters, Rupprecht, Liebner, Acker, Plate, Amann: "Angiopoietin 1 and 2 gene and protein expression is differentially regulated in acute anti-Thy1.1 glomerulonephritis." in: **American journal of physiology. Renal physiology**, Vol. 294, Issue 5, pp. F1174-84, (2008) (PubMed).

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. Immunoprecip-itation 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.

