

For Research Use Only

Angiopoietin-2 Polyclonal antibody

Catalog Number: 31499-1-AP

2 Publications



Basic Information

Catalog Number:

31499-1-AP

Size:

150ul, Concentration: 810 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

EG0666

GenBank Accession Number:

NM_007426.4

GeneID (NCBI):

11601

UNIPROT ID:

O35608

Full Name:

angiopoietin 2

Calculated MW:

56KD

Observed MW:

68 kDa

Purification Method:

Antigen affinity Purification

Recommended Dilutions:

WB: 1:2000-1:12000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

Applications

Tested Applications:

WB, IHC, IP, ELISA

Cited Applications:

WB

Species Specificity:

mouse, rat

Cited Species:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse lung tissue, mouse kidney tissue, rat lung tissue

IP : rat lung tissue,

IHC : mouse brain tissue, mouse colon tissue

Background Information

Angiopoietin-2 (ANGPT2, ANG-2) is as a regulator of vessel enlargement, and ANGPT2 inhibition prevented pathological vessel enlargement (PMID: 34758631). ANGPT2 destabilizes vessels and promotes angiogenesis through antagonism of ANGPT1 (PMID: 34758631). Ang2 was initially identified by homology with Ang1 and is expressed predominantly by endothelial cells, where it is stored in intracellular secretory granules called Weibel-Palade bodies (WPB) and promptly released after endothelium activation. Like Ang1, Ang2 binds to Tie2 receptor, but with different pathophysiological effects. While Ang1 fosters endothelial stabilization, Ang2 can antagonize Ang1, blocking Tie2 activation and leading to vessel destabilization (PMID: 31756341).

Notable Publications

Author	Pubmed ID	Journal	Application
Chuyang Tai	41968454	CNS Neurosci Ther	WB
Lin Lin	41084506	Drug Des Devel Ther	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

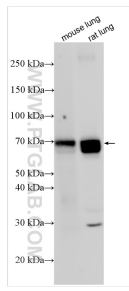
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

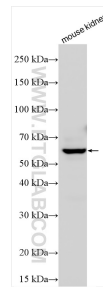
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

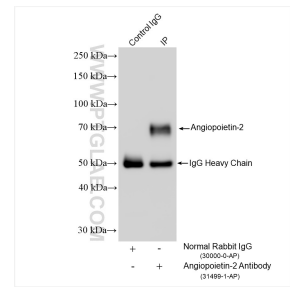
Selected Validation Data



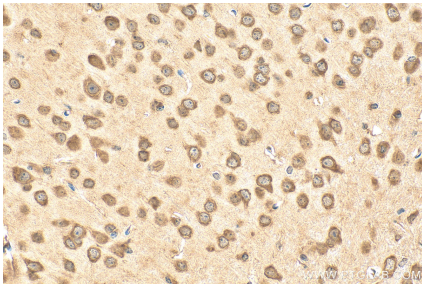
Various lysates were subjected to SDS PAGE followed by western blot with 31499-1-AP (Angiopietin-2 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



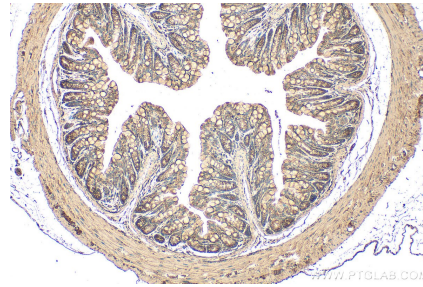
Various lysates were subjected to SDS PAGE followed by western blot with 31499-1-AP (Angiopietin-2 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



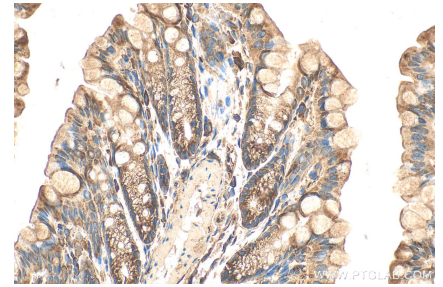
IP result of anti-Angiopietin-2 (IP:31499-1-AP, 4ug; Detection:31499-1-AP 1:3000) with rat lung tissue lysate 1200 ug.



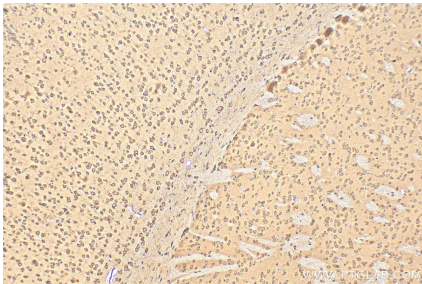
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 31499-1-AP (Angiopietin-2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 31499-1-AP (Angiopietin-2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 31499-1-AP (Angiopietin-2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 31499-1-AP (Angiopietin-2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).