

For Research Use Only

# Angiopoietin-2 Recombinant antibody

Catalog Number: 83816-1-RR



## Basic Information

Catalog Number:

83816-1-RR

Size:

100ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM\_007426.4

GeneID (NCBI):

11601

UNIPROT ID:

O35608

Full Name:

angiopoietin 2

Calculated MW:

56KD

Observed MW:

68kDa

Purification Method:

Protein A purification

CloneNo.:

240760D5

Recommended Dilutions:

WB 1:2000-1:10000

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

IHC 1:300-1:1200

## Applications

Tested Applications:

WB, IHC, IP, ELISA

Species Specificity:

mouse

**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 spleen tissue, mouse lung tissue

IP : mouse lung tissue,

IHC : mouse kidney tissue, mouse brain 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).

## Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

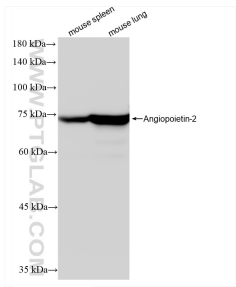
For technical support and original validation data for this product please contact:

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

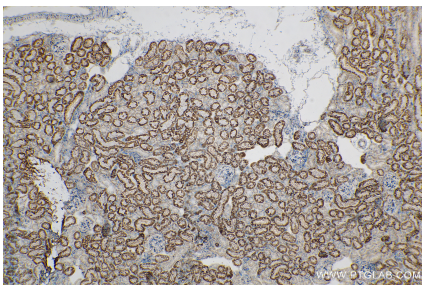
E: proteintech@ptglab.com  
W: ptglab.com

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

Selected Validation Data



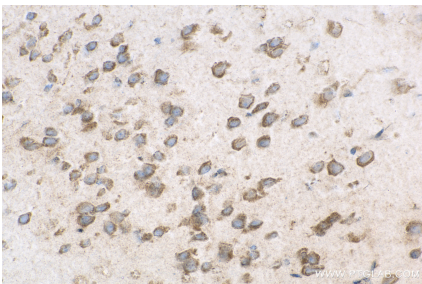
Various lysates were subjected to SDS PAGE followed by western blot with 83816-1-RR (Angiopoietin-2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



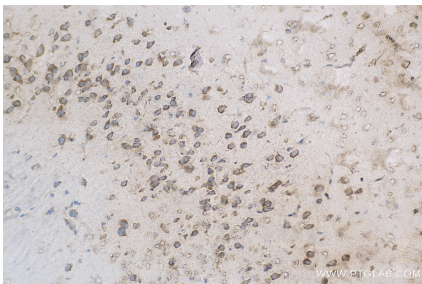
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 83816-1-RR (Angiopoietin-2 antibody) at dilution of 1:600 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



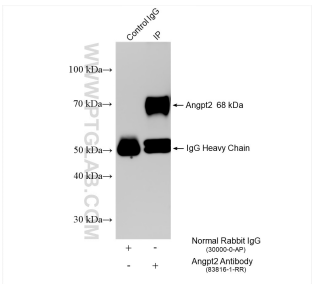
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 83816-1-RR (Angiopoietin-2 antibody) at dilution of 1:600 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



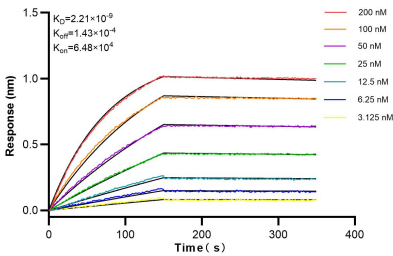
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 83816-1-RR (Angiopoietin-2 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 83816-1-RR (Angiopoietin-2 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-Angiopoietin-2 (IP:83816-1-RR, 4ug; Detection:83816-1-RR 1:1500) with mouse lung tissue lysate 1200 ug.



Biolayer interferometry (BLI) kinetic assays of 83816-1-RR against Mouse Angiopoietin-2 were performed. The affinity constant is below 1 pM.