For Research Use Only

## Angiopoietin-2 Recombinant antibody

Catalog Number:83816-1-RR

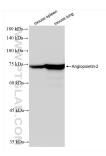


Basic Information	Catalog Number: 83816-1-RR	GenBank Accession Numb NM_007426.4	per: Purification Method: Protein A purfication
	Concentration: 1000 ug/ml	GeneID (NCBI): 11601	CloneNo.: 240760D5
	Source: Rabbit Isotype: IgG	UNIPROT ID: O 35608 Full Name: angiopoietin 2 Calculated MW: 56KD	Recommended 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
		Observed MW: 68kDa	
Applications			ositive Controls:
			B : mouse spleen tissue, mouse lung tissue
	Species Specificity: mouse	IP	: mouse lung tissue,
			IC : 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 Storage Buffer: PBS with 0.02% sodium azide Aliquoting is unnecessary for	e and 50% glycerol pH 7.3.	

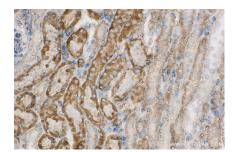
For technical support and original validation data for this product please contact:T: 4006900926E: Proteintech-CN@ptglab.comW: ptgcn.com

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

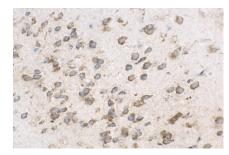
## Selected Validation Data



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 paraffinembedded 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).



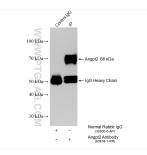
Immunohistochemical analysis of paraffinembedded mouse kidney tissue slide using 83816-1-RR (Angiopoietin-2 antibody) at dilution of 1:600 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



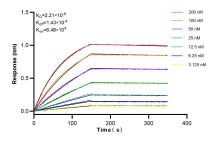
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 83816-1-RR (Angiopoietin-2 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded 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.