

For Research Use Only

# VCP Recombinant antibody

Catalog Number: 82463-1-RR

1 Publications



## Basic Information

<b>Catalog Number:</b> 82463-1-RR	<b>GenBank Accession Number:</b> BC007562	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 7415	<b>CloneNo.:</b> 3G23
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P55072	<b>Recommended Dilutions:</b> WB: 1:5000-1:50000
<b>Isotype:</b> IgG	<b>Full Name:</b> valosin-containing protein	<b>IHC:</b> 1:50-1:500
<b>Immunogen Catalog Number:</b> AG1002	<b>Calculated MW:</b> 89 kDa	<b>IF-P:</b> 1:250-1:1000
	<b>Observed MW:</b> 89 kDa	<b>IF/ICC:</b> 1:500-1:2000

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IF-P, ELISA	<b>Positive Controls:</b> <b>WB :</b> HeLa cells, A549 cells, MCF-7 cells, RAW 264.7 cells, human brain tissue, mouse brain tissue, rat brain tissue
<b>Cited Applications:</b> WB	<b>IHC :</b> rat small intestine tissue,
<b>Species Specificity:</b> human, mouse, rat	<b>IF-P :</b> rat brain tissue,
<b>Cited Species:</b> human	<b>IF/ICC :</b> HeLa cells,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

VCP(Valosin-containing protein), also known as TER ATPase and 15S Mg<sup>2+</sup>-ATPase p97 subunit, belongs to the AAA ATPase family. VCP was first identified as a result of attempts to clone a putative peptide hormone called valosin. It was found that the cloned cDNA encoded a ubiquitously expressed 90 kDa cytosolic protein, termed VCP, which showed none of the characteristics of a peptide hormone precursor(PMID:1382975). Defects in VCP are the cause of inclusion body myopathy with early-onset Paget disease and frontotemporal dementia (IBMPFD) and amyotrophic lateral sclerosis type 14 with or without frontotemporal dementia (ALS14). VCP has a calculated molecular weight of 89 kDa and an apparent molecular weight of 90-100 kDa (PMID: 15732117, 1382975).

## Notable Publications

Author	Pubmed ID	Journal	Application
Xian-Jia Li	40012358	J Med Chem	WB

## Storage

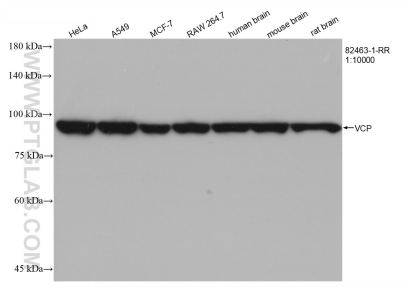
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

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

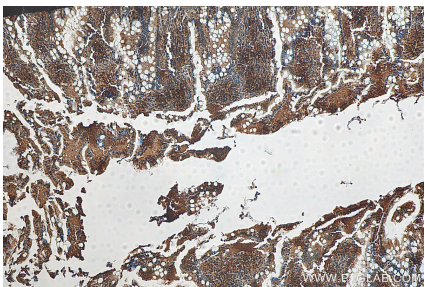
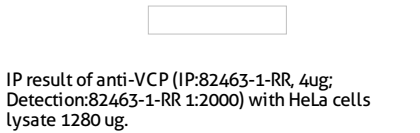
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

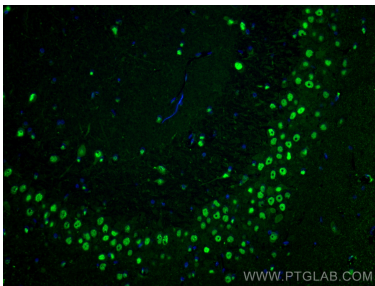
Selected Validation Data



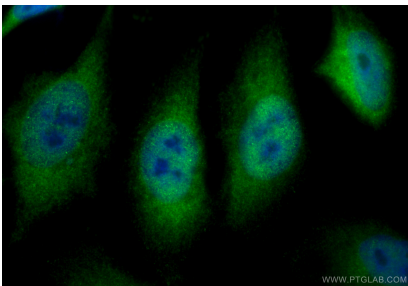
Various lysates were subjected to SDS PAGE followed by western blot with 82463-1-RR (VCP antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



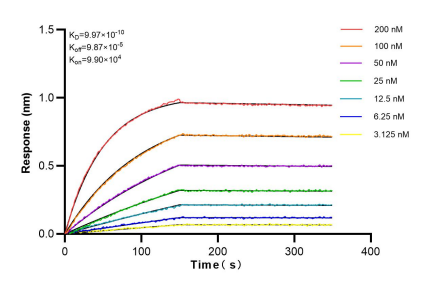
Immunohistochemical analysis of paraffin-embedded rat small intestine tissue slide using 82463-1-RR (VCP antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat brain tissue using VCP antibody (82463-1-RR, Clone: 3G23 ) at dilution of 1:500 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using VCP antibody (82463-1-RR, Clone: 3G23 ) at dilution of 1:1000 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).



Bilayer interferometry (BLI) kinetic assays of 82463-1-RR against Human VCP were performed. The affinity constant is 0.997 nM.