

For Research Use Only

VCP Recombinant antibody

Catalog Number: 82463-1-RR



Basic Information

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

Applications

Tested Applications:
WB, IHC, IF/ICC, IF-P, ELISA

Species Specificity:
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 : HeLa cells, A549 cells, MCF-7 cells, RAW 264.7 cells, human brain tissue, mouse brain tissue, rat brain tissue

IHC : rat small intestine tissue,

IF-P : rat brain tissue,

IF/ICC : HeLa cells,

Background Information

VCP (Valosin-containing protein), also known as TER ATPase and 15S Mg²⁺-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).

Storage

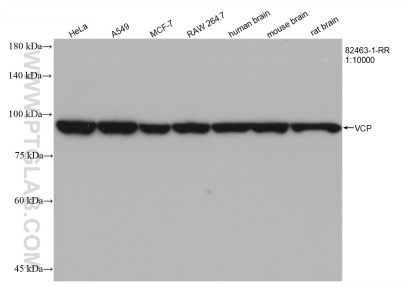
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

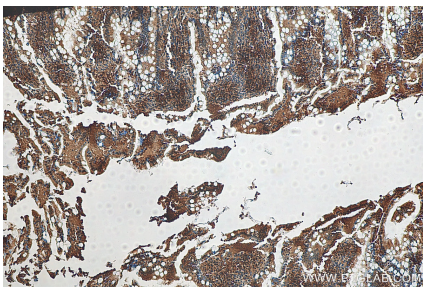
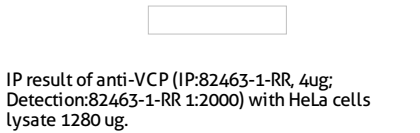
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

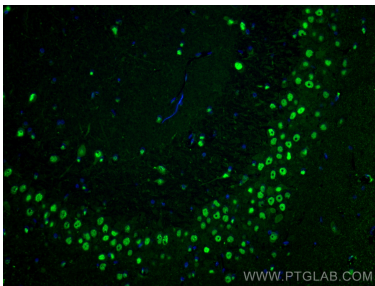
Selected Validation Data



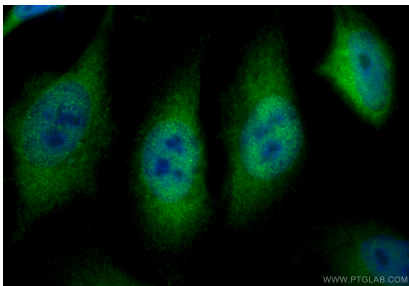
Various lysates were subjected to SDS PAGE followed by western blot with 82463-1-RR (VCP antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



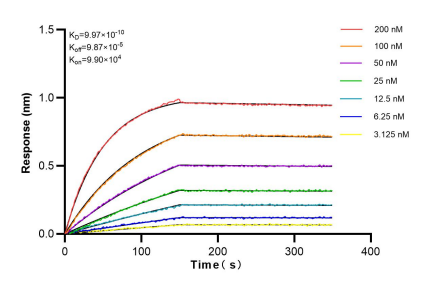
Immunohistochemical analysis of paraffin-embedded rat small intestine tissue slide using 82463-1-RR (VCP antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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.