

## VCP Monoclonal antibody

Catalog Number: 60316-1-Ig

Featured Product

4 Publications

## Basic Information

<b>Catalog Number:</b> 60316-1-Ig	<b>GenBank Accession Number:</b> BC007562	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul, Concentration: 800 µg/ml by Nanodrop and 667 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 7415	<b>CloneNo.:</b> 2A4B10
<b>Source:</b> Mouse	<b>Full Name:</b> valosin-containing protein	<b>Recommended Dilutions:</b> WB 1:500-1:2000 IHC 1:20-1:200 IF 1:20-1:200
<b>Isotype:</b> IgG1	<b>Calculated MW:</b> 89 kDa	
<b>Immunogen Catalog Number:</b> AG1002	<b>Observed MW:</b> 89 kDa	

## Applications

**Tested Applications:**  
FC, IF, IHC, WB, ELISA

**Cited Applications:**  
ChIP, IF, WB

**Species Specificity:**  
human, mouse

**Cited Species:**  
human

**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 :** RAW 264.7 cells, WT and VCP KO U2OS cells, SH-SY5Y cells, HeLa cells

**IHC :** human gliomas tissue,

**IF :** RAW 264.7 cells, HeLa cells, SH-SY5Y cells

## 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
Janja Božič	34534264	Brain	WB, IF
Xiao-Jing Li	33495516	Acta Pharmacol Sin	WB
Fengli Wang	37223481	Research (Wash D C)	WB, IF

## 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

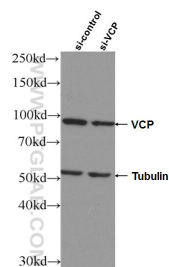
For technical support and original validation data for this product please contact:

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

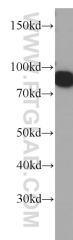
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

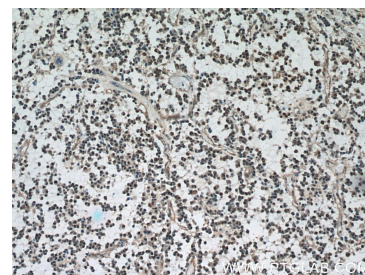
## Selected Validation Data



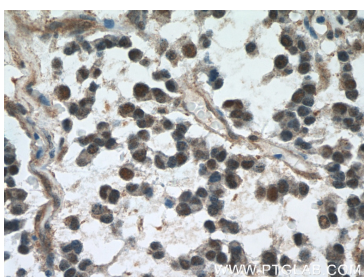
WB result of VCP antibody (60316-1-Ig; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-VCP transfected HeLa cells.



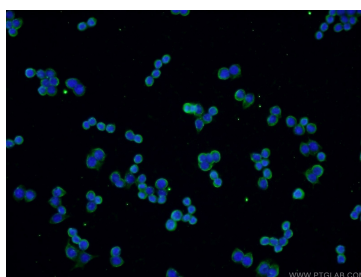
RAW 264.7 cells were subjected to SDS PAGE followed by western blot with 60316-1-Ig (VCP Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



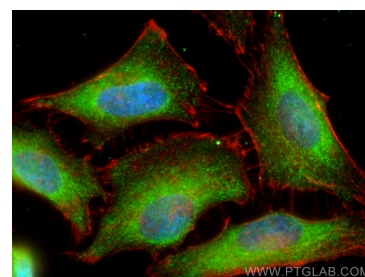
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 60316-1-Ig (VCP Antibody) at dilution of 1:50 (under 10x lens).



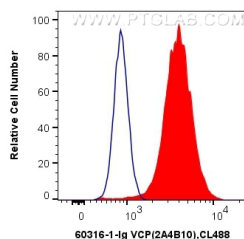
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 60316-1-Ig (VCP Antibody) at dilution of 1:50 (under 40x lens).



Immunofluorescent analysis of RAW 264.7 cells using 60316-1-Ig (VCP antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using VCP antibody (60316-1-Ig, Clone: 2A4B10) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).



1X10<sup>6</sup> HL-60 cells were intracellularly stained with 0.4 ug Anti-Human VCP (60316-1-Ig, Clone:2A4B10) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).