For Research Use Only

VCP Monoclonal antibody

Catalog Number:60316-1-Ig Featured Product 4 Publications

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Basic Information

Catalog Number:
60316-1-Ig

Size:
150ul , Concentration: 800 μg/ml by Nanodrop and 667 μg/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG1002

GenBank Accession Number:
BC007562

GeneID (NCBI):
7415

UNIPROT ID:
P55072

Full Name:
valosin-containing protein

Calculated MW:
89 kDa

Observed MW:
89 kDa

Purification Method:
Protein A purification

CloneNo.:
2A4B10

Recommended Dilutions:
WB 1:500-1:2000
IHC 1:20-1:200
IF 1:20-1:200

Applications

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

Cited Applications:
WB, IF, ChIP

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 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).

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

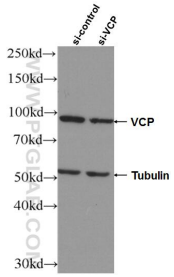
Storage

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

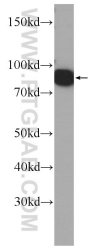
*** 20ul sizes contain 0.1% BSA

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
W: ptglab.com

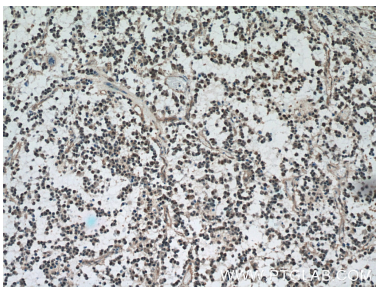
Selected Validation Data



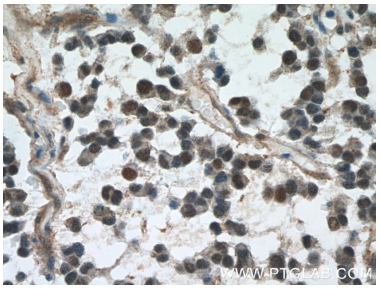
WB result of VCP antibody (60316-1-Ig; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-VCP transfected HeLa cells.



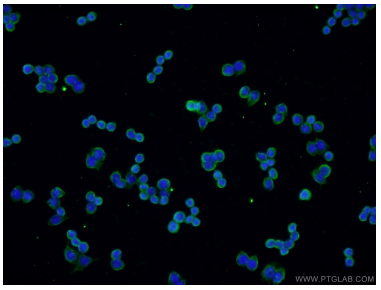
RAW 264.7 cells were subjected to SDS PAGE followed by western blot with 60316-1-Ig (VCP Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



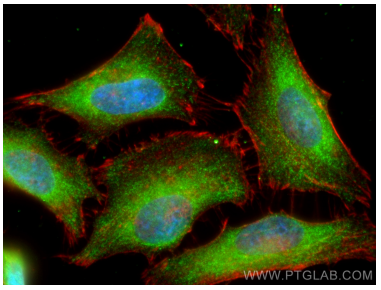
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 60316-1-Ig (VCP Antibody) at dilution of 1:50 (under 10x lens).



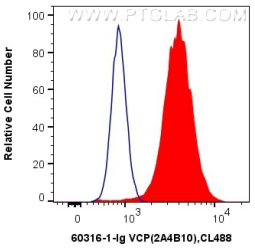
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 60316-1-Ig (VCP Antibody) at dilution of 1:50 (under 40x lens).



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).



1X10^6 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).