For Research Use Only

VCP Recombinant antibody

Catalog Number:82463-1-RR 1 Publications



Basic Information

Catalog Number: GenBank Accession Number: 82463-1-RR BC007562 GeneID (NCBI): Concentration: 1000 ug/ml 7415

UNIPROT ID: Source: Rabbit P55072 Full Name: Isotype:

valosin-containing protein

Calculated MW: Immunogen Catalog Number:

AG1002 89 kDa Observed MW:

89 kDa

Purification Method:

Protein A purification

CloneNo.: 3G23

Recommended Dilutions: WB: 1:5000-1:50000

IHC: 1:50-1:500 IF-P: 1:250-1:1000 IF/ICC: 1:500-1:2000

Applications

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

Cited Applications:

WB

Species Specificity: human, mouse, rat Cited Species:

buffer pH 6.0

human Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

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).

Notable Publications

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

Storage

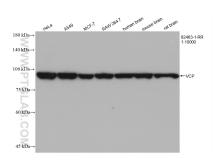
Storage:

Store at -20°C. Stable for one year after shipment.

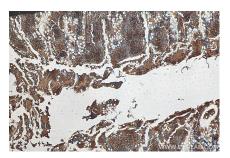
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data

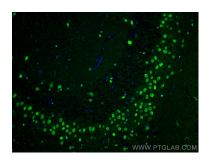


IP result of anti-VCP (IP:82463-1-RR, 4ug; Detection:82463-1-RR 1:2000) with HeLa cells lysate 1280 ug.

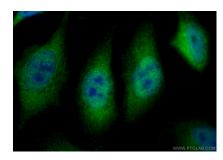


Various lysates were subjected to SDS PAGE followed by western blot with 82463-1-RR (VCP antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.

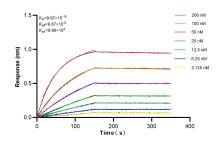
Immunohistochemical analysis of paraffinembedded rat small intestine tissue slide using 82463-1-RR (VCP antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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