

# VCP Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a full-length recombinant VCP. Catalog # AT4506a

## **Product Information**

Application	WB, IHC, E
Primary Accession	<u>P55072</u>
Other Accession	<u>BC007562</u>
Reactivity	Human, Mouse, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	4A8
Calculated MW	89322

### **Additional Information**

Gene ID	7415
Other Names	Transitional endoplasmic reticulum ATPase, TER ATPase, 15S Mg(2+)-ATPase p97 subunit, Valosin-containing protein, VCP, VCP
Target/Specificity	VCP (AAH07562, 1 a.a. ~ 588 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	VCP Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

### Background

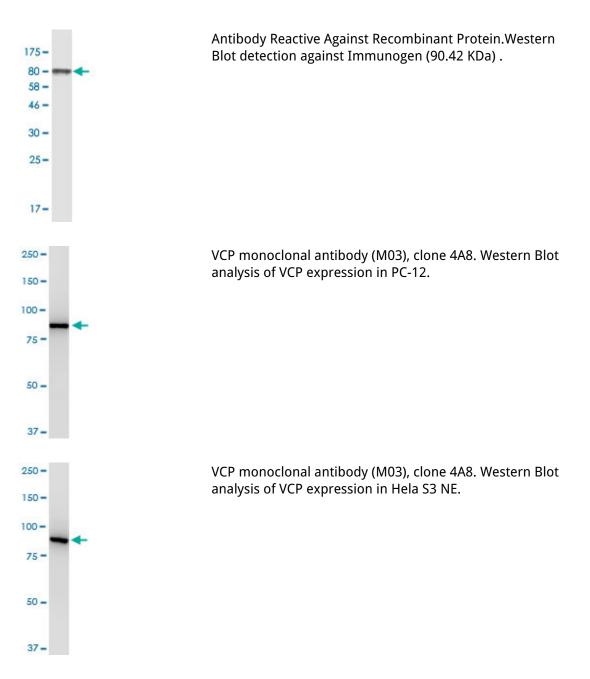
The protein encoded by this gene is a member of a family that includes putative ATP-binding proteins involved in vesicle transport and fusion, 26S proteasome function, and assembly of peroxisomes. This protein, as a structural protein, is associated with clathrin, and heat-shock protein Hsc70, to form a complex. It has been implicated in a number of cellular events that are regulated during mitosis, including homotypic membrane fusion, spindle pole body function, and ubiquitin-dependent protein degradation.

### References

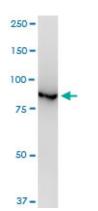
Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes

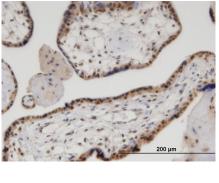
REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.A novel ATP-dependent conformation in p97 N-D1 fragment revealed by crystal structures of disease-related mutants. Tang WK, et al. EMBO J, 2010 Jul 7. PMID 20512113.Centrosome-related genes, genetic variation, and risk of breast cancer. Olson JE, et al. Breast Cancer Res Treat, 2010 May 28. PMID 20508983.Identification of Caspase-6-mediated processing of the valosin containing protein (p97) in Alzheimer's disease: a novel link to dysfunction in ubiquitin proteasome system-mediated protein degradation. Halawani D, et al. J Neurosci, 2010 Apr 28. PMID 20427671.Imbalances in p97 co-factor interactions in human proteinopathy. Fern?ndez-S?iz V, et al. EMBO Rep, 2010 Jun. PMID 20414249.





VCP monoclonal antibody (M03), clone 4A8. Western Blot analysis of VCP expression in Raw 264.7.





Immunoperoxidase of monoclonal antibody to VCP on formalin-fixed paraffin-embedded human placenta. [antibody concentration 3 ug/ml]

0.6 0.5 0.4 0.3 0.2 0.1 0.0 0.01 0.1 1 10 100 Recombinant Protein Concentration (ng/ml)

Detection limit for recombinant GST tagged VCP is 1 ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.