

**VCP Antibody (monoclonal) (M03)**  
**Mouse monoclonal antibody raised against a full-length recombinant VCP.**  
**Catalog # AT4506a**

## Specification

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### VCP Antibody (monoclonal) (M03) - Product Information

Application	WB, IHC, E
Primary Accession	<a href="#">P55072</a>
Other Accession	<a href="#">BC007562</a>
Reactivity	Human, Mouse, Rat
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	89322

### VCP Antibody (monoclonal) (M03) - 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.

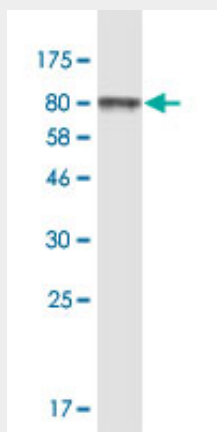
### VCP Antibody (monoclonal) (M03) - Protocols

Provided below are standard protocols that you may find useful for product applications.

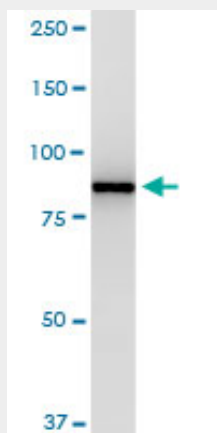
- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

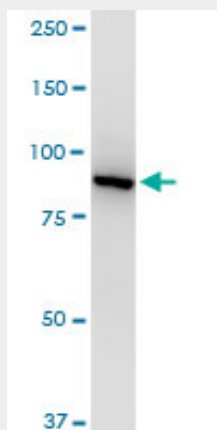
### VCP Antibody (monoclonal) (M03) - Images



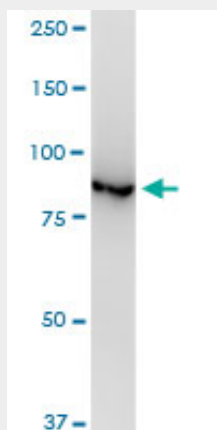
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (90.42 KDa) .



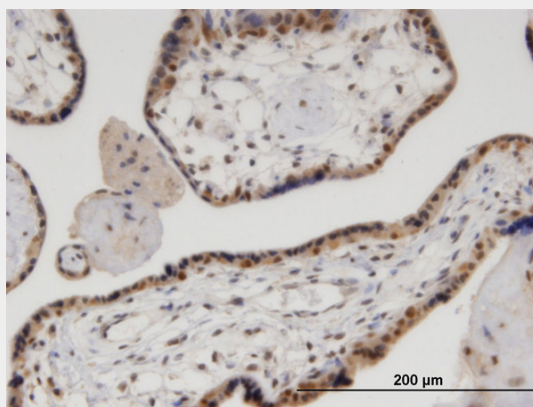
VCP monoclonal antibody (M03), clone 4A8. Western Blot analysis of VCP expression in PC-12.



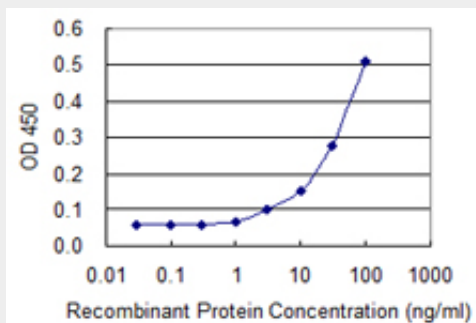
VCP monoclonal antibody (M03), clone 4A8. Western Blot analysis of VCP expression in Hela S3 NE.



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]



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

### VCP Antibody (monoclonal) (M03) - 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.

**VCP Antibody (monoclonal) (M03) - References**

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-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. Fernandez-Solis V, et al. EMBO Rep, 2010 Jun. PMID 20414249.