

## DATASHEET

# VCP Mouse Monoclonal Antibody(C3034)

CAT. NO. AMA02646

### KEY FEATURES

Target	VCP	Source / Host	Mouse
Reactivity	Human, Mouse	Clonality	Monoclonal
Applications	WB, IF/ICC, FC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

### BACKGROUND

Necessary for the fragmentation of Golgi stacks during mitosis and for their reassembly after mitosis. Involved in the formation of the transitional endoplasmic reticulum (tER). The transfer of membranes from the endoplasmic reticulum to the Golgi apparatus occurs via 50-70 nm transition vesicles which derive from part-rough, part-smooth transitional elements of the endoplasmic reticulum (tER). Vesicle budding from the tER is an ATP-dependent process. The ternary complex containing UFD1, VCP and NPLOC4 binds ubiquitinated proteins and is necessary for the export of misfolded proteins from the ER to the cytoplasm, where they are degraded by the proteasome.

### APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IF/ICC	1:100 - 1:500
FC	1:100 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

### PRODUCT OVERVIEW

Description	Mouse monoclonal to VCP
Specificity	Recognizes endogenous levels of VCP protein
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human VCP expressed in HEK293
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 89 kD; Observed: 90 kD
Form/Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	Transitional endoplasmIC, retIC,ulum ATPase; TER ATPase; 15S Mg(2+)-ATPase p97 subunit; Valosin-containing protein; VCP
Gene Symbol	VCP
Entrez Gene	7415(Human); 116643(Rat)
SwissProt	P55072(Human); Q01853(Mouse)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

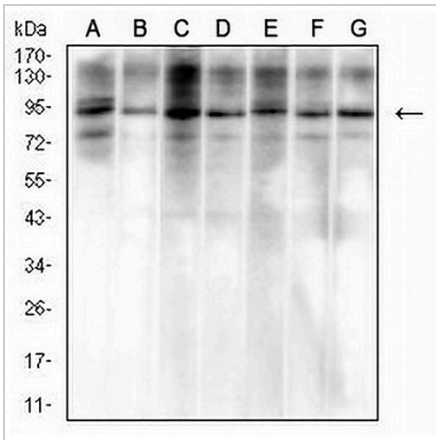
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

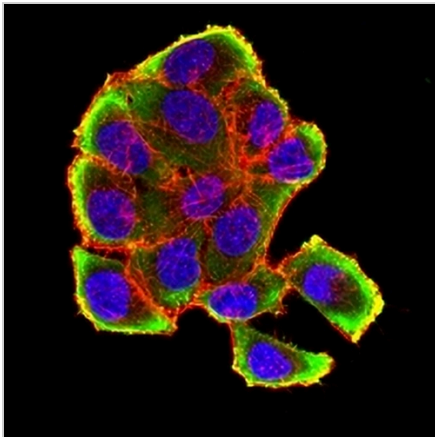
**VCP Mouse Monoclonal Antibody(C3034)**

CAT. NO. AMA02646

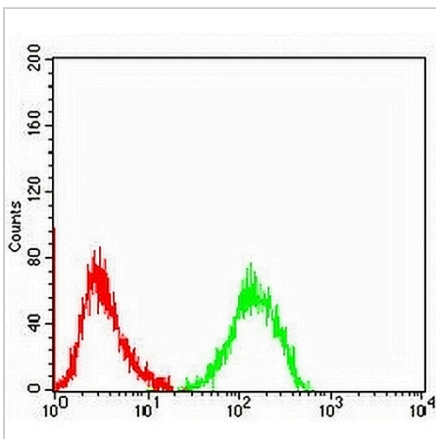
**DATA**



Western blot analysis of VCP expression in Hela (A), A549 (B), NIH/3T3 (C), Raw264.7 (D), SHSY5Y (E), MCF7 (F), A431 (G) whole cell lysates. (Predicted band size: 89 kD; Observed band size: 90 kD)



Immunofluorescent analysis of VCP staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Flow cytometric analysis of MOLT4 cells using Anti-VCP Antibody (green) and negative control (red).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.