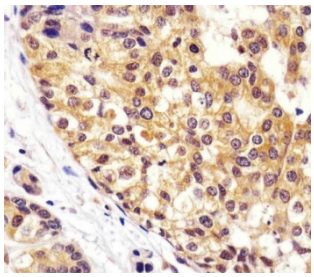
VCP Antibody [clone 1563CT163.48.77] (F54487)

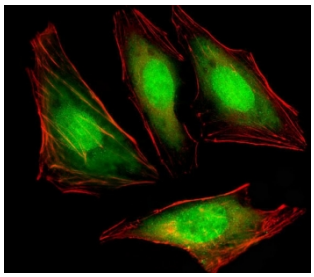
Catalog No.	Formulation	Size
F54487-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F54487-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

Bulk quote request

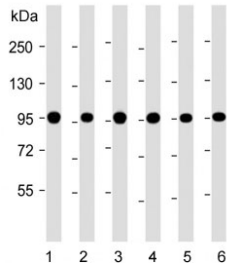
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	IgG1, kappa
Clone Name	1563CT163.48.77
Purity	Protein G affinity
UniProt	P55072
Localization	Cytoplasmic, nuclear
Applications	Western blot: 1:500-1:2000 Immunohistochemistry (FFPE): 1:25 Flow cytometry: 1:25 (1x10e6 cells) Immunofluorescence: 1:25
Limitations	This VCP antibody is available for research use only.



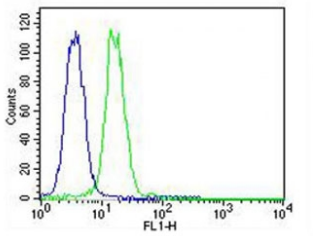
IHC testing of FFPE human breast cancer tissue with VCP antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Immunofluorescent staining of fixed and permeabilized human HeLa cells with VCP antibody (green) and anti-Actin (red).



Western blot testing of human 1) HeLa, 2) K562, 3) human A549, 4) rat C6, 5) human U-87 MG and 6) mouse NIH 3T3 lysate with VCP antibody. Expected molecular weight: 89-97 kDa.



Flow cytometry testing of fixed and permeabilized human K562 cells with VCP antibody; Blue=isotype control, Green= VCP antibody.

Description

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 UFD1L, 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. The NPLOC4-UFD1L-VCP complex regulates spindle disassembly at the end of mitosis and is necessary for the formation of a closed nuclear envelope. Regulates E3 ubiquitin-protein ligase activity of RNF19A. Component of the VCP/p97-AMFR/gp78 complex that participates in the final step of the sterol-mediated ubiquitination and endoplasmic reticulum-associated degradation (ERAD) of HMGCR. Also involved in DNA damage response: recruited to double-strand breaks (DSBs) sites in a RNF8- and RNF168-dependent manner and promotes the recruitment of TP53BP1 at DNA damage sites. Recruited to stalled replication forks by SPRTN: may act by mediating extraction of DNA polymerase eta (POLH) to prevent excessive translesion DNA synthesis and limit the incidence of mutations induced by DNA damage. Required for cytoplasmic retrotranslocation of stressed/damaged mitochondrial outer-membrane proteins and their subsequent proteasomal degradation.

Application Notes

The stated application concentrations are suggested starting points. Titration of the VCP antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Recombinant human protein was used as the immunogen for the VCP antibody.

Storage

Aliquot the VCP antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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