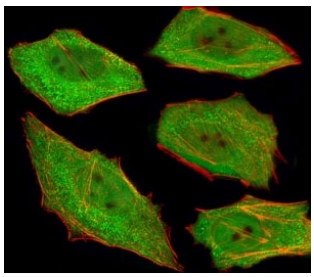
VCP Antibody [clone 1344CT150.163.114] (F52449)

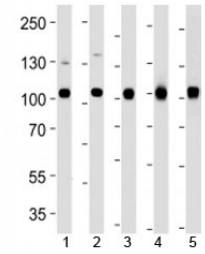
Catalog No.	Formulation	Size
F52449-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F52449-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, k
Clone Name	1344CT150.163.114
Purity	Purified
UniProt	P55072
Applications	Immunofluorescence : 1:25 Western Blot : 1:1000
Limitations	This VCP antibody is available for research use only.



Fluorescent image of U251 cells stained with VCP antibody at 1:25. An Alexa Fluor 488-conjugated goat anti-mouse IgG was used as the secondary Ab (green). Cytoplasmic actin was counterstained with Alexa Fluor 555 conjugated with Phalloidin (red).



Western blot analysis of lysate from 1) MCF-7, 2) U251, 3) mouse NIH3T3, 4) rat C6 cell line and 5) mouse liver tissue using VCP antibody at 1:1000. Predicted/observed molecular weight: ~89/97kDa.

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 (By similarity). 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.

Application Notes

Titration of the VCP antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This VCP antibody was produced from a mouse immunized with a recombinant protein from human VCP.

Storage

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