Datasheet for ABIN6242610

anti-VCP antibody

4 Images

Go to Product page

Overview

Quantity:	200 µL
Target:	VCP
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This VCP antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Flow Cytometry (FACS)

Product Details

Immunogen:	This VCP antibody is generated from a mouse immunized with a recombinant protein of human TERA.
Clone:	1563CT163-48-77
Isotype:	IgG1 kappa
Purification:	This antibody is purified through a protein G column, followed by dialysis against PBS.

Target Details

Target:	VCP
Alternative Name:	VCP (VCP Products)
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

Target Details

	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.
Molecular Weight:	89322
UniProt:	P55072
Pathways:	ER-Nucleus Signaling, Positive Regulation of Endopeptidase Activity, Ubiquitin Proteasome Pathway

Application Details

Application Notes:	IF: 1:25. WB: 1:4000. IHC-P: 1:25. FC: 1:25
Restrictions:	For Research Use only

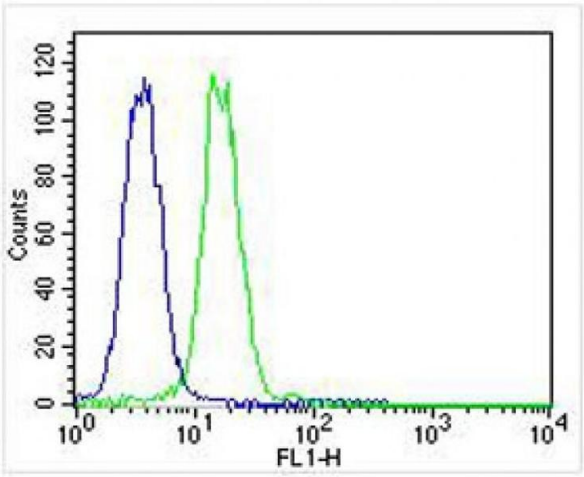
Handling

Format:	Liquid
Buffer:	Purified monoclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C

Handling

Expiry Date:	6 months

Images



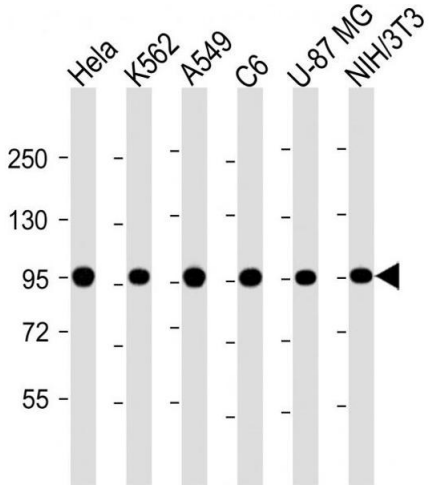
Flow Cytometry

Image 1. Overlay histogram showing K562 cells stained with (ABIN6242610 and ABIN6577131) (green line). The cells were fixed with 2 % paraformaldehyde (10 min) and then permeabilized with 90 % methanol for 10 min. The cells were then icubated in 2 % bovine serum albumin to block non-specific protein-protein interactions followed by the antibody ((ABIN6242610 and ABIN6577131), 1:25 dilution) for 60 min at 37 °C. The secondary antibody used was Goat-Anti-Mouse IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(NA168821)) at 1/400 dilution for 40 min at 37 °C. Isotype control antibody (blue line) was mouse IgG1 (1 µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

Immunofluorescence

Image 2. Immunofluorescent analysis of 4 % paraformaldehyde-fixed, 0.1 % Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling TERA with (ABIN6242610 and ABIN6577131) at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-mouse IgG (NA166821) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm and nucleus staining on HeLa cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red).

Images



Western Blotting

Image 3. All lanes : Anti-VCP Antibody at 1:4000 dilution Lane 1: Hela whole cell lysate Lane 2: K562 whole cell lysate Lane 3: A549 whole cell lysate Lane 4: C6 whole cell lysate Lane 5: U-87 MG whole cell lysate Lane 6: NIH/3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 89 kDa Blocking/Dilution buffer: 5 % NFDM/TBST.

Please check the product details page for more images. Overall 4 images are available for ABIN6242610.