Datasheet for ABIN1944899

anti-VCP antibody (AA 1-225)

2 Images | 1 Publication

Go to Product page

Overview

Quantity:	400 µL
Target:	VCP
Binding Specificity:	AA 1-225
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This VCP antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	This VCP antibody is generated from a mouse immunized with a recombinant protein from human VCP.
Clone:	1344CT150-163-114
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

Target Details

	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.
Molecular Weight:	89322
Gene ID:	7415
UniProt:	P55072
Pathways:	ER-Nucleus Signaling, Positive Regulation of Endopeptidase Activity, Ubiquitin Proteasome Pathway

Application Details

Application Notes:	IF: 0.059027777777778. WB: 1:2000
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.

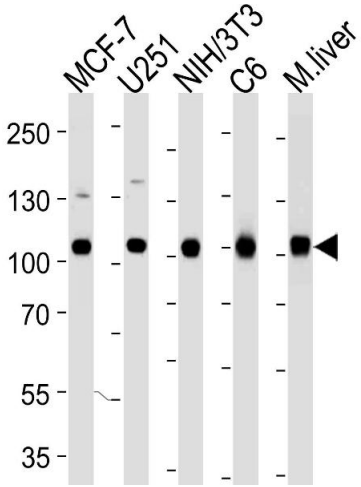
Handling

Storage:	4 °C,-20 °C
Expiry Date:	6 months

Publications

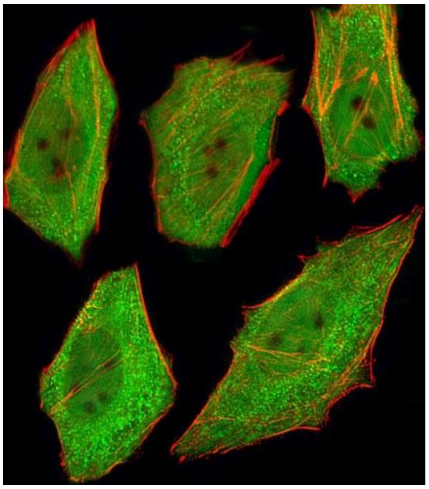
Product cited in:	Humphray, Oliver, Hunt, Plumb, Loveland, Howe, Andrews, Searle, Hunt, Scott, Jones, Ainscough, Almeida, Ambrose, Ashwell, Babbage, Babbage, Bagguley, Bailey, Banerjee, Barker, Barlow, Bates, Beasley et al.: "DNA sequence and analysis of human chromosome 9. ..." in: **Nature**, Vol. 429, Issue 6990, pp. 369-74, (2004) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of lysates from MCF-7, , mouse NIH/3T3, rat C6 cell line and mouse liver tissue lysate (from left to right) using VCP Antibody (ABIN1944899 and ABIN2838502). (ABIN1944899 and ABIN2838502) was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:3000 dilution was used as the secondary antibody. Lysates at 35 µg per lane.



Immunofluorescence

Image 2. Fluorescent image of cells stained with VCP Antibody (ABIN1944899 and ABIN2838502). (ABIN1944899 and ABIN2838502) was diluted at 1:25 dilution. An Alexa Fluor® 488-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).