




Product datasheet

Anti-VCP antibody ab238522

1 Image

Overview

Product name	Anti-VCP antibody
Description	Rabbit polyclonal to VCP
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Cow 
Immunogen	<p>Synthetic peptide corresponding to Human VCP aa 351-541. Sequence:</p> <p>NSIDPALRRFGRFDREVDIGIPDATGRLEILQIHTKNMKLAD DVDLEQVA NETHGHVGDLAALCSEAALQAIRKKMDLIDLEDETIDAEV MNSLAVTMD DFRWALSQSNPSALRETVVEVPQVTWEDIGGLEDVKREL QELVQYPVEHP DKFLKFGMTPSKGVLFYGPPEGKTLAKAIANECQANFI S</p> <p>Database link: P55072</p> <p style="text-align: right;"> Run BLAST with  Run BLAST with</p>
Positive control	WB: HEK-293T, BT-474, SW480, A549 and 22Rv1 cell extract.; Mouse brain, eye, heart and gastrocnemius muscle extract.
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been "predicted to work</p>

with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol
Purity	Affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab238522** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/2000. Predicted molecular weight: 89 kDa.

Target

Function	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 (By similarity). Regulates E3 ubiquitin-protein ligase activity of RNF19A.
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Involvement in disease	Defects in VCP are the cause of inclusion body myopathy with early-onset Paget disease and frontotemporal dementia (IBMPFD) [MIM:167320]; also known as muscular dystrophy, limb-girdle, with Paget disease of bone or pagetoid amyotrophic lateral sclerosis or pagetoid neuroskeletal syndrome or lower motor neuron degeneration with Paget-like bone disease. IBMPFD features
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adult-onset proximal and distal muscle weakness (clinically resembling limb girdle muscular dystrophy), early-onset Paget disease of bone in most cases and premature frontotemporal dementia.

Sequence similarities

Belongs to the AAA ATPase family.

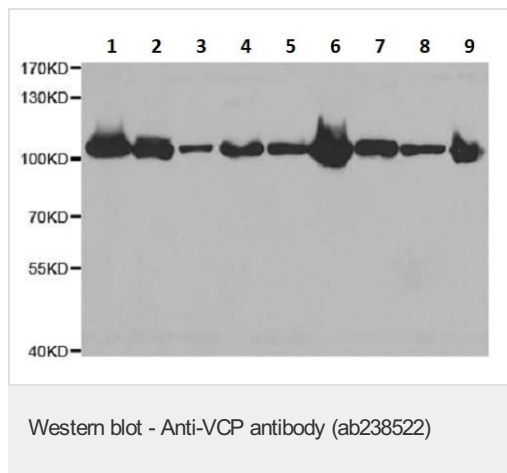
Post-translational modifications

Phosphorylated by tyrosine kinases in response to T-cell antigen receptor activation (By similarity). Phosphorylated upon DNA damage, probably by ATM or ATR. ISGylated.

Cellular localization

Cytoplasm > cytosol. Nucleus. Present in the neuronal hyaline inclusion bodies specifically found in motor neurons from amyotrophic lateral sclerosis patients. Present in the Lewy bodies specifically found in neurons from Parkinson disease patients.

Images



All lanes : Anti-VCP antibody (ab238522) at 1/300 dilution

Lane 1 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) cell extracts

Lane 2 : BT-474 (Human ductal breast epithelial tumor cell line) cell extracts

Lane 3 : SW480 (Human colorectal adenocarcinoma cell line) cell extracts

Lane 4 : A549 (Human lung carcinoma cell line) cell extracts

Lane 5 : 22Rv1 (Human prostate carcinoma cell line) cell extracts

Lane 6 : Mouse brain extract

Lane 7 : Mouse eye extract

Lane 8 : Mouse heart extract

Lane 9 : Mouse gastrocnemius muscle extract

Lysates/proteins at 25 µg per lane.

Secondary

All lanes : HRP Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Developed using the ECL technique.

Predicted band size: 89 kDa

Exposure time: 5 seconds

Blocking buffer: 3% non-fat dry milk in TBST.

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