

Product datasheet

Recombinant Human VCP protein ab132074

1 Image

Description

<b>Product name</b>	Recombinant Human VCP protein
<b>Expression system</b>	Wheat germ
<b>Accession</b>	<a href="#">P55072</a>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human

Sequence

MASGADSKGDDLSTAILKQKNRPNRLMDEAINEDNSVVS  
 LSQPKMDELQ  
 LFRGDTVLLKGGKRREAVCMLSDDTCSDEKIRMNRVVRN  
 NLRVRLGDVI  
 SIQPCPDVKYKGRIHVLPIDDTVEGITGNLFEVYLKPYFLEA  
 YRPIRKGD  
 IFLVRGGMRAVEFKVETDPSPYCIVAPDTVHCEGEPIKR  
 EDEEESLNE  
 VGYDDIGGCRKQLAQIKEMVELPLRHPALFKAIGVKPPRGI  
 LLYGPPGTG  
 KTLIARAVANETGAFFFLINGPEIMSKLAGESSESNLRKAFE  
 EAEKNAPAI  
 IFIDELDAIAPKREKTHGEVERRIVSQLLTLMDGLKQRAHVI  
 VMAATNRP  
 NSIDPALRRFGRFDREVDIGIPDATGRLEILQIHTKNMKLAD  
 DVDLEQVA  
 NETHGHVGADLAALCSEAALQAIRKKMDLIDLEDETIDAEV  
 MNSLAVTMD  
 DFRWALSQSNPSALRETVVEVPQVTWEDIGGLEDVKREL  
 QELVQYPVEHP  
 DKFLKFGMTPSKGVLFYGPPEGKTLAKAIANECQANFI  
 SIKGPELLTM  
 WFGESEANVREIFDKARQAAPCVLFFDELDSIAKARGGNI  
 GDGGGAADRV  
 INQILTEMDGMSTKKNVFIIGATNRPDIIDPAILRPGRLDQLM  
 PLPDE  
 KSRVAILKANLRKSPVAKDVDLEFLAKMTNGFSGADLTEI  
 CQRACKLAIR

ESIESEIRRERERQTNPSAMEVEEDDPVPEIRRDHFEEAM  
RFARRSVSDN  
DIRKYEMFAQTLQQSRGFGSFRFPSTGNQGGAGPSQGGSG  
GGTGGSVYTEDN DDDLTYG

**Predicted molecular weight** 116 kDa including tags

**Amino acids** 1 to 806

## Specifications

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Our [Abpromise guarantee](#) covers the use of **ab132074** in the following tested applications.

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

**Applications** SDS-PAGE  
Western blot  
ELISA

**Form** Liquid

## Preparation and Storage

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**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCl

## General Info

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**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.

**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 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.

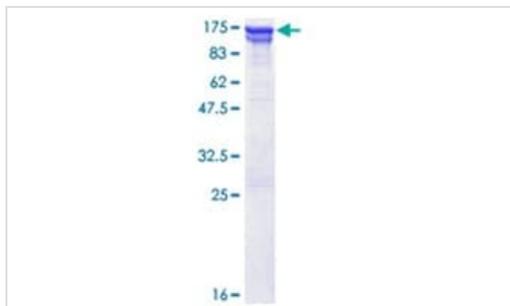
**Sequence similarities** Belongs to the AAA ATPase family.

**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



12.5% SDS-PAGE analysis of ab132074, stained with Coomassie Blue.

SDS-PAGE - Recombinant Human VCP protein  
(ab132074)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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