abcam

Product datasheet

Recombinant Human VCP protein - BSA and Azide free ab173074

Description

Product name	Recombinant Human VCP protein - BSA and Azide free
Purity	> 95 % SDS-PAGE. Greater than 95% as determined by SEC-HPLC and reducing SDS-PAGE.
Endotoxin level	< 1.000 Eu/µg
Expression system	Escherichia coli
Accession	P55072
Protein length	Protein fragment
Animal free	No
Carrier free	Yes
Nature	Recombinant
Species	Human
Sequence	MASGADSKGDDLSTAILKQKNRPNRLIVDEAINEDNSVVS LSQPKMDELQ LFRGDTVLLKGKKRREAVCIVLSDDTCSDEKIRMNRVVRN NLRVRLGDVI SIQPCPDVKYGKRIHVLPIDDTVEGITGNLFEVYLKPYFLEA YRPIRKGD IFLVRGGMRAVEFKVVETHPSPYCIVAPDTVIHCEGEPIKR EDEEESLNE VGYDDIGGCRKQLAQIKEMVELPLRHPALFKAIGVKPPRGI LLYGPPGTG KTLIARAVANETGAFFFLINGPEIMSKLAGESESNLRKAFE EAEKNAPAI IFIDELDAIAPKREKTHGEVERRIVSQLLTLMDGLKQRAHVI VMAATNRP NSIDPALRRFGRFDREVDIGIPDATGRLEILQIHTKNMKLAD DVDLEQVA NETHGHVGADLAALCSEAALQAIRKKMDLIDLEDETIDAEV MNSLAVTMD DFRWALSQSNPSALRETVVEVPQVTWEDIGGLEDVKREL QELVQYPVEHP DKFLKFGMTPSKGVLFYGPPGCGKTLLAKAIANECQANFI SIKGPELLTM

WFGESEANVREIFDKARQAAPCVLFFDELDSIAKA
RGGNVEHHHHHH

Predicted molecular weight	67 kDa including tags
Amino acids	2 to 589
Tags	His tag C-Terminus
Description	Recombinant Human VCP protein (BSA and azide free)

Specifications

Our **Abpromise guarantee** covers the use of **ab173074** in the following tested applications.

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

Applications	HPLC SDS-PAGE
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituent: 0.61% Tris

General Info

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.

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

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