

Recombinant human USP10 protein ab198669

2 Images

Description	
Product name	Recombinant human USP10 protein
Biological activity	Specific Activity: 23 pmol/min/µg. Assay Conditions: Reaction was performed in 50 mM Tris, pH 7.4, 1 mM DTT, 0.5 mM EDTA, 500 nM Ub-AMC, and ab198669 in a 50 µL volume. Reaction was incubated at 37°C for 15 min. and fluorescent signal was measured at excitation = 340 nm, emission = 460 nm.
Purity	>= 60 % SDS-PAGE. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Accession	<u>Q14694</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	ALHSPQYIFGDFSPDEFNQFFVTPRSSVELPPYSGTVLCG TQAVDKLPDG QEYQRIEFGVDEVIEPSDTLPRTPSYSISSTLNPQAPEFILG CTASKITP DGITKEASYGSIDCQYPGSALALDGSSNVEAEVLENDGVS GGLGQRRKK KKKRPPGYSYLKDGGDDSSISTEALVNGHANSAPNSVS AEDAEFMGDMP PSVTPRTCNSPQNSTDVSDVMPDSPFPGALGSDTRTAG QPEGGPADFG QSCFPAEAGRDTLSRTAGAQPCVGTDTTENLGVANGQIL ESSGEGTATNG VELHTTESIDLPTKPESASPPADGTGSASGTLPVSQPKS WASLFHDSKP SSSSPVAYWETKYSPPAISPLVSEKQVEVKEGLVPVSEDP VAIKIAELLE NVTLIHKPVSLQPRGLINKGNWCYNATLQALVACPPMYHL MKFIPLYSK

VQRPCTSTPMIDSFVRLMNEFTNMPVPPKPRQALGDKIVR
DIRPGAAPFEP
TYIRLLTVNKSSLSEKGRQEDAEELGFIINLHEEMLNL
KKLLSPSNE
KLTISNGPKNHSVNEEEEQEEQGESEDEWEQVGPRNKT
SVTRQADFVQTP
ITGIFGGHIRSVVYQQSSKESATLQPFFTLQLDIQSDKIRTVQ
DALESLV
ARESVQGYTTKTKQEVEISRRVTLEKLPPVLVLHLKRFVYE
KTGGCQKLI
KNIEYPVDLEISKELLSPGVKNKNFKCHRTYRLFVAVYHHG
NSATGGHYT
TDVFQIGLNGWLRIDDQTVKVINQYQVVKPTAERTAYLLYY
RRVDLL

Predicted molecular weight	88 kDa including tags
Amino acids	2 to 798
Tags	DDDDK tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab198669** 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 Functional Studies
Form	Liquid
Additional notes	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.71% Tris HCl, 0.72% Sodium chloride, 0.02% Potassium chloride, 10% Glycerol (glycerin, glycerine), 0.05% (R*,R*)-1,4-Dimercaptobutan-2,3-diol Contains 90 µg/mL DDDDK peptide This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

Function	Hydrolase that can remove conjugated ubiquitin from target proteins such as p53/TP53, SNX3 and CFTR. Acts as an essential regulator of p53/TP53 stability: in unstressed cells, specifically deubiquitinates p53/TP53 in the cytoplasm, leading to counteract MDM2 action and stabilize p53/TP53. Following DNA damage, translocates to the nucleus and deubiquitinates p53/TP53, leading to regulate the p53/TP53-dependent DNA damage response. Does not deubiquitinate MDM2. Deubiquitinates CFTR in early endosomes, enhancing its endocytic recycling.
Tissue specificity	Widely expressed.

Sequence similarities

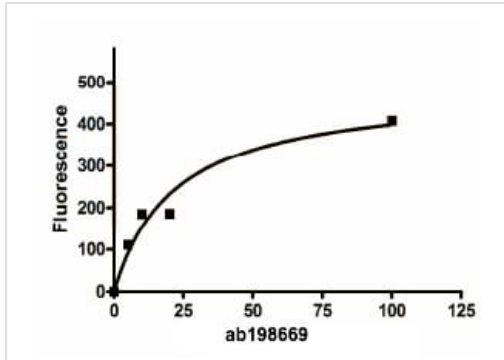
Belongs to the peptidase C19 family. USP10 subfamily.

Post-translational modifications

Phosphorylated by ATM following DNA damage, leading to stabilization and translocation to the nucleus.

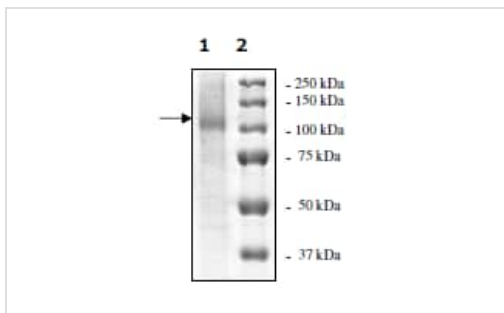
Cellular localization

Cytoplasm. Nucleus. Early endosome. Cytoplasmic in normal conditions. After DNA damage, translocates to the nucleus following phosphorylation by ATM.

Images

Example of specific activity of ab198669.

Functional Studies - Recombinant human USP10 protein (ab198669)



10% SDS-PAGE with Coomassie staining: 3 µg ab198669.

SDS-PAGE - Recombinant human USP10 protein (ab198669)

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