

Product datasheet

Recombinant human UBPY/USP8 protein ab198666

2 Images

Description

**Product name** Recombinant human UBPY/USP8 protein

**Biological activity** Specific Activity: 246 pmol/min/μg.

**Purity** >= 70 % SDS-PAGE.

**Expression system** Baculovirus infected Sf9 cells

**Accession** [P40818](#)

**Protein length** Full length protein

**Animal free** No

**Nature** Recombinant

**Species** Human

**Sequence**

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PAVASVPKELYLSSSLKDLNKKTEVKPEKISTKSYVHS
ALKIFKTAEECR
LDRDEERAYVLYMKYVTVYNLIKKRPFDFKQQQDYFHSIL
GPGNIKKAVEE
AERLSESLKLRYYEEAEVRKKLEEKDRQEEAQLQQKR
QETGREDGGTLAK
GSENVLDSKDKTQKSNGEKNEKCETKEKGAITAKEL
YTMMDKNISLII
MDARRMQDYQDSCILHSLSVPEEAISPGVTASWIEAHL
PDDSKDTWKKRG
NVEYVLLDWFSSAKDLQIGTTLRSLKDALFKWESKT
VLRNEPLVLEGGY
ENWLLCYPQYTTNAKVTPPPRRQNEEVSISLDFTYPSL
EESIPSKPAAQT
PPASIEVDENIELISGQNERMGPLNISTPVEPVAASKSD
VSPIIQPVPSI
KNVPQIDRTKKPAVKLPPEEHRIKSESTNHEQQSPQSG
KVIPDRSTKPVVF
SPTLMLTDEEKARIHAETALLMEKNKQEKELRERQQE
EQKEKLRKEEQEQ
KAKKKQEAENEITEKQQKAKEEMEKKESEQAKKED
KETSAKRKGEITGV
KRQSKSEHETSDAKKSVEDRGKRCPTPEIQKSTGD
VPHTSVTGDSGSGK
    
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PFKIKGQPESGILRTGTFREDTDDTERNKAQREPLTRA  
RSEEMGRIVPGL  
PSGWAKFLDPITGTFRYHSPNTVHMYPPEMAPSSA  
PPSTPPTHKAKPQ  
IPAERDREPSKLRSYSSPDITQAIQEEERKRPVTPTV  
NRENKPTCYPK  
AEISRLSASQIRNLNPVFGGSGPALTGLRNLGNTCYMN  
SILQCLCNAPHL  
ADYFNRCYQDDINRSNLLGHKGEVAEEFGIIMKALWT  
GQYRISPDKFK  
ITGKINDQFAGYSQQDSQELLLFLMDGLHEDLNKADN  
RKRYKEENNDHL  
DDFKAAEHAWQKHKQLNESIVALFQQQFKSTVQCLT  
CHKKSRTFEAFMY  
LSLPLASTSKCTLQDCLRLFSKEEKLTDNNRFYC  
SHC  
RARRDSLKKIEW  
KLPPVLLVHLKRFSDGRWKQKLQTSVDFPLENLDLS  
QYVIGPKNNLKKY  
NLFVSNHYGGLDGGHYTAYCKNAARQRWFKFDDHE  
VSDISVSSVKSSAA YILFYTSLGPRVTDVAT

<b>Predicted molecular weight</b>	128 kDa including tags
<b>Amino acids</b>	2 to 1118
<b>Tags</b>	DDDDK tag N-Terminus

## Specifications

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Our [Abpromise guarantee](#) covers the use of **ab198666** in the following tested applications.

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

<b>Applications</b>	Functional Studies SDS-PAGE
<b>Form</b>	Liquid
<b>Additional notes</b>	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

## Preparation and Storage

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<b>Stability and Storage</b>	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, 0.05% DTT  90 µg/mL FLAG peptide  This product is an active protein and may elicit a biological response in vivo, handle with caution.
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## General Info

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<b>Function</b>	Hydrolase that can remove conjugated ubiquitin from proteins and therefore plays an important
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regulatory role at the level of protein turnover by preventing degradation. Converts both 'Lys-48' and 'Lys-63'-linked ubiquitin chains. Catalytic activity is enhanced in the M phase. Involved in cell proliferation. Required to enter into S phase in response to serum stimulation. May regulate T-cell anergy mediated by RNF128 via the formation of a complex containing RNF128 and OTUB1. Probably regulates the stability of STAM2 and RASGRF1. Regulates endosomal ubiquitin dynamics, cargo sorting, membrane traffic at early endosomes, and maintenance of ESCRT-0 stability. The level of protein ubiquitination on endosomes is essential for maintaining the morphology of the organelle. Deubiquitinates EPS15 and controls tyrosine kinase stability. Removes conjugated ubiquitin from EGFR thus regulating EGFR degradation and downstream MAPK signaling. Involved in acrosome biogenesis through interaction with the spermatid ESCRT-0 complex and microtubules. Deubiquitinates BIRC6/bruce and KIF23/MKLP1.

#### Sequence similarities

Belongs to the peptidase C19 family.  
Contains 1 MIT domain.  
Contains 1 rhodanese domain.  
Contains 1 USP domain.

#### Domain

The MIT domain is required for endosomal localization, CHMP1B-binding, maintenance of ESCRT-0 stability and EGFR degradation.  
The rhodanese domain is sufficient for RNF41-binding.

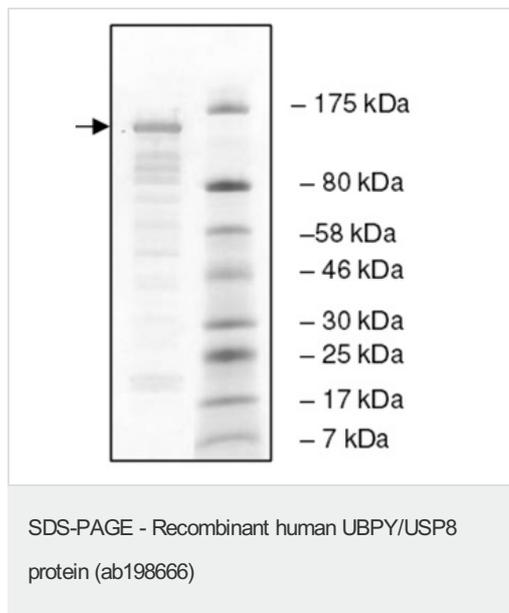
#### Post-translational modifications

Phosphorylation of Ser-718 is essential for interaction with YWHAE and for cytosol localization. Undergoes dephosphorylation at Ser-718 in the M phase. Tyrosine-phosphorylated in its N-terminal half in an EGFR-dependent manner.  
Ubiquitinated. Inactive form is mostly monoubiquitinated, but polyubiquitination happens too. Ubiquitination is increased in EGF-stimulated cells. Ubiquitination of active form is undetectable, suggesting a possibility that USP8 deubiquitinates itself, thereby regulating its own function.

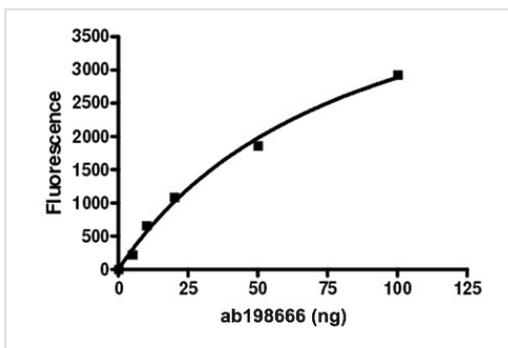
#### Cellular localization

Cytoplasm. Nucleus. Endosome membrane. Cell membrane.

#### Images



4-20% SDS-PAGE analysis of ab198666 (0.5 µg) with Coomassie staining.



Example of specific activity of ab198666.

Functional Studies - Recombinant human  
UBPY/USP8 protein (ab198666)

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

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