abcam

Product datasheet

Recombinant Human UBPY/USP8 protein ab127607

1 References

Description

Product name	Recombinant Human UBPY/USP8 protein
Purity	> 95 % SDS-PAGE. Purified via His tag
Expression system	Escherichia coli
Accession	P40818
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	25 kDa
Amino acids	886 to 1096
Tags	His-DHFR tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab127607** 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
Form	Lyophilized

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at -20ºC. Constituents: 0.32% Tris HCl, 0.58% Sodium chloride
Reconstitution	Reconstitute with water to desired concentration.

General Info

Function	Hydrolase that can remove conjugated ubiquitin from proteins and therefore plays an important regulatory role at the level of protein turnover by preventing degradation. Converts both 'Lys-48' an

	'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 controles 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.