

USP8 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2137A

Specification

USP8 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	<u>P40818</u>
Other Accession	<u>Q80U87</u>
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	127523
Antigen Region	1-30

USP8 Antibody (N-term) - Additional Information

Gene ID 9101

Other Names

Ubiquitin carboxyl-terminal hydrolase 8, Deubiquitinating enzyme 8, Ubiquitin isopeptidase Y, hUBPy, Ubiquitin thioesterase 8, Ubiquitin-specific-processing protease 8, USP8, KIAA0055, UBPY

Target/Specificity

This USP8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human USP8.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

USP8 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

USP8 Antibody (N-term) - Protein Information

Name USP8 (<u>HGNC:12631</u>)



Synonyms KIAA0055, UBPY

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 ubiquitinates 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. Deubiquitinates BACE1 which inhibits BACE1 lysosomal degradation and modulates BACE-mediated APP cleavage and amyloid-beta formation (PubMed:<u>27302062</u>).

Cellular Location

Cytoplasm. Nucleus {ECO:0000250|UniProtKB:Q80U87} Endosome membrane; Peripheral membrane protein. Cell membrane; Peripheral membrane protein

USP8 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- USP8 Antibody (N-term) Images

The anti-USP8 Pab (Cat. #AP2137a) is used in Western blot to detect USP8 in transfected 293T cells. Data is kindly provided by Lily Yen from University of California Davis (Davis, CA).

USP8 Antibody (N-term) - Background

USP8 is a ubiquitin specific protease that plays an important regulatory role at the level of protein turnover by preventing degradation. USP8 is involved in cell proliferation, and probably regulates



the stability of STAM2 and RASGRF1. USP8 may regulate T-cell anergy mediated by RNF128 via the formation of a complex containing RNF128 and STAM2. As revealed by structur/function studies, USP8 forms a ternary complex with RNF128 and OTUB1, and interacts with the SH3 domain of STAM2 and RASGRF1. Expression of USP8 is induced Upon growth stimulation in starved human fibroblasts, and expression decreases in response to growth arrest induced by cell-cell contact.

USP8 Antibody (N-term) - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002). Naviglio, S., et al., EMBO J. 17(12):3241-3250 (1998). Nomura, N., et al., DNA Res. 1(5):223-229 (1994).