

# USP8 (UBPY) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2137B

### Specification

# USP8 (UBPY) Antibody (C-term) - Product Information

| Application       | IHC-P, WB,E |
|-------------------|-------------|
| Primary Accession | P40818      |
| Other Accession   | O80U87      |
| Reactivity        | Human       |
| Predicted         | Mouse       |
| Host              | Rabbit      |
| Clonality         | Polyclonal  |
| Isotype           | Rabbit IgG  |
| Calculated MW     | 127523      |
| Calculated MW     | 127523      |
| Antigen Region    | 1058-1087   |

## USP8 (UBPY) Antibody (C-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 (UBPY) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1058-1087 amino acids from the C-terminal region of human USP8 (UBPY).

**Dilution** IHC-P~~1:50~100 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 (UBPY) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## USP8 (UBPY) Antibody (C-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 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. Deubiquitinates BACE1 which inhibits BACE1 lysosomal degradation and modulates BACE-mediated APP cleavage and amyloid-beta formation (PubMed:<u>27302062</u>).

#### **Cellular Location**

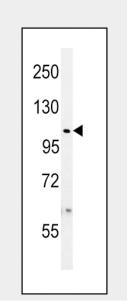
Cytoplasm. Nucleus {ECO:0000250|UniProtKB:Q80U87} Endosome membrane; Peripheral membrane protein. Cell membrane; Peripheral membrane protein

# USP8 (UBPY) Antibody (C-term) - Protocols

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

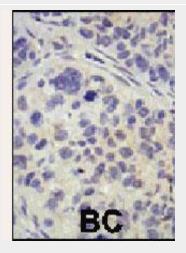
- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### USP8 (UBPY) Antibody (C-term) - Images





USP8-C1072 (Cat. #AP2137b) western blot analysis in WiDr cell line lysates (35ug/lane). This demonstrates the USP8 antibody detected the USP8 protein (arrow).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

# USP8 (UBPY) Antibody (C-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 (UBPY) Antibody (C-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).