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USP8 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP2137a

Specification

USP8 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession	P40818
Other Accession	UBP8_HUMAN

USP8 Antibody (N-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP2137a was selected from the N-term region of human USP8 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

USP8 Antibody (N-term) Blocking Peptide - Protein Information

Name USP8 (HGNC:12631)

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:27302062).

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

USP8 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

USP8 Antibody (N-term) Blocking Peptide - Images

USP8 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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).