

USP4 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP14657a**Specification**

USP4 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q13107](#)**USP4 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 7375**Other Names**

Ubiquitin carboxyl-terminal hydrolase 4, Deubiquitinating enzyme 4, Ubiquitin thioesterase 4, Ubiquitin-specific-processing protease 4, Ubiquitous nuclear protein homolog, USP4, UNP, UNPH

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.

USP4 Antibody (N-term) Blocking Peptide - Protein Information**Name** USP4 {ECO:0000303|PubMed:30514904, ECO:0000312|HGNC:HGNC:12627}**Function**

Deubiquitinating enzyme that removes conjugated ubiquitin from target proteins (PubMed:16316627, PubMed:16472766, PubMed:16339847, PubMed:20595234, PubMed:22347420, PubMed:25404403, PubMed:28604766, PubMed:30514904).

Deubiquitinates PDPK1 (PubMed:22347420). Deubiquitinates TRIM21 (PubMed:16316627).

Deubiquitinates receptor ADORA2A which increases the amount of functional receptor at the cell surface (PubMed:16339847). Deubiquitinates HAS2 (PubMed:28604766).

Deubiquitinates RHEB in response to EGF signaling, promoting mTORC1 signaling (PubMed:28604766).

[30514904](http://www.uniprot.org/citations/30514904)). May regulate mRNA splicing through deubiquitination of the U4 spliceosomal protein PRPF3 (PubMed: [20595234](http://www.uniprot.org/citations/20595234)). This may prevent its recognition by the U5 component PRPF8 thereby destabilizing interactions within the U4/U6.U5 snRNP (PubMed: [20595234](http://www.uniprot.org/citations/20595234)). May also play a role in the regulation of quality control in the ER (PubMed: [16339847](http://www.uniprot.org/citations/16339847)).

Cellular Location

Cytoplasm. Nucleus. Note=Shuttles between the nucleus and cytoplasm. Exported to the cytoplasm in a CRM1-dependent manner and recycled back to the nucleus via the importin alpha/beta heterodimeric import receptor. The relative amounts found in the nucleus and cytoplasm vary according to the cell type

Tissue Location

Overexpressed in small cell tumors and adenocarcinomas of the lung compared to wild-type lung (at protein level). Expressed in the hippocampal neurons

USP4 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

USP4 Antibody (N-term) Blocking Peptide - Images

USP4 Antibody (N-term) Blocking Peptide - Background

Hydrolase that deubiquitinates target proteins such as the receptor ADORA2A and TRIM21. Deubiquitination of ADORA2A increases the amount of functional receptor at the cell surface. Plays a role in the regulation of quality control in the ER.

USP4 Antibody (N-term) Blocking Peptide - References

Morgan, A.R., et al. Hum. Immunol. 71(6):602-609(2010) So, H.C., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (1), 103-113 (2010) :Zhao, B., et al. J. Cell. Mol. Med. 13 (8B), 1886-1895 (2009) :Milojevic, T., et al. Mol. Pharmacol. 69(4):1083-1094(2006) Wada, K., et al. Biochem. Biophys. Res. Commun. 342(1):253-258(2006)