

USP21 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP2041a**Specification**

USP21 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q9UK80](#)**USP21 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 27005**Other Names**

Ubiquitin carboxyl-terminal hydrolase 21, Deubiquitinating enzyme 21, Ubiquitin thioesterase 21, Ubiquitin-specific-processing protease 21, USP21, USP23

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2041a](/product/products/AP2041a) was selected from the Center region of human USP21. 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.

USP21 Antibody (Center) Blocking Peptide - Protein Information**Name** USP21 {ECO:0000303|PubMed:10799498, ECO:0000312|HGNC:HGNC:12620}**Function**

Deubiquitinates histone H2A, a specific tag for epigenetic transcriptional repression, thereby acting as a coactivator (By similarity). Deubiquitination of histone H2A releases the repression of di- and trimethylation of histone H3 at 'Lys-4', resulting in regulation of transcriptional initiation (By similarity). Regulates gene expression via histone H2A deubiquitination (By similarity). Deubiquitinates BAZ2A/TIP5 leading to its stabilization (PubMed: [26100909](http://www.uniprot.org/citations/26100909)). Also capable of removing NEDD8 from NEDD8 conjugates but has no effect on Sentrin-1 conjugates (PubMed: [10799498](http://www.uniprot.org/citations/10799498)). Also acts as a negative regulator of the ribosome quality control (RQC) by mediating deubiquitination of 40S ribosomal proteins RPS10/eS10 and RPS20/uS10, thereby antagonizing ZNF598-mediated 40S ubiquitination (PubMed: [32011234](http://www.uniprot.org/citations/32011234))

target="_blank">32011234).

Cellular Location

Cytoplasm. Nucleus

Tissue Location

Highly expressed in heart, pancreas and skeletal muscle. Also expressed in brain, placenta, liver and kidney, and at very low level in lung.

USP21 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

USP21 Antibody (Center) Blocking Peptide - Images**USP21 Antibody (Center) Blocking Peptide - Background**

USP21 is a ubiquitin-specific protease, an enzyme that removes ubiquitin from ubiquitinated proteins. The encoded protein belongs to the C19 peptidase family, also known as family 2 of ubiquitin carboxyl-terminal hydrolases. This protein has been reported to be capable of removing NEDD8 from NEDD8 conjugates.

USP21 Antibody (Center) Blocking Peptide - References

Puente, X.S., et al., Nat. Rev. Genet. 4(7):544-558 (2003).Gong, L., et al., J. Biol. Chem. 275(19):14212-14216 (2000).Hillier, L.D., et al., Genome Res. 6(9):807-828 (1996).Smith, T.S., et al., Biochim. Biophys. Acta 1490 (1-2), 184-188 (2000).