

USP19 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP2145a**Specification**

USP19 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession [O94966](#)
Other Accession [NP_006668](#)

USP19 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 10869

Other Names

Ubiquitin carboxyl-terminal hydrolase 19, Deubiquitinating enzyme 19, Ubiquitin thioesterase 19, Ubiquitin-specific-processing protease 19, Zinc finger MYND domain-containing protein 9, USP19, KIAA0891, ZMYND9

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2145a](/product/products/AP2145a) was selected from the N-term region of human USP19. 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.

USP19 Antibody (N-term) Blocking Peptide - Protein Information

Name USP19

Synonyms KIAA0891, ZMYND9

Function

Deubiquitinating enzyme that regulates the degradation of various proteins. Deubiquitinates and prevents proteasomal degradation of RNF123 which in turn stimulates CDKN1B ubiquitin-dependent degradation thereby playing a role in cell proliferation. Involved in decreased protein synthesis in atrophying skeletal muscle. Modulates transcription of major myofibrillar proteins. Also involved in turnover of endoplasmic-reticulum-associated degradation (ERAD) substrates. Regulates the stability of BIRC2/c-IAP1 and BIRC3/c-IAP2 by preventing their ubiquitination. Required for cells to mount an appropriate response to hypoxia and rescues HIF1A

from degradation in a non- catalytic manner. Plays an important role in 17 beta-estradiol (E2)-inhibited myogenesis. Decreases the levels of ubiquitinated proteins during skeletal muscle formation and acts to repress myogenesis. Exhibits a preference towards 'Lys-63'-linked ubiquitin chains.

Cellular Location

Endoplasmic reticulum membrane; Single-pass membrane protein

USP19 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

USP19 Antibody (N-term) Blocking Peptide - Images**USP19 Antibody (N-term) Blocking Peptide - Background**

Modification of target proteins by ubiquitin participates in a wide array of biological functions. Proteins destined for degradation or processing via the 26 S proteasome are coupled to multiple copies of ubiquitin. However, attachment of ubiquitin or ubiquitin-related molecules may also result in changes in subcellular distribution or modification of protein activity. An additional level of ubiquitin regulation, deubiquitination, is catalyzed by proteases called deubiquitinating enzymes, which fall into four distinct families. Ubiquitin C-terminal hydrolases, ubiquitin-specific processing proteases (USPs),¹ OTU-domain ubiquitin-aldehyde-binding proteins, and Jab1/Pad1/MPN-domain-containing metallo-enzymes. Among these four families, USPs represent the most widespread and represented deubiquitinating enzymes across evolution. USPs tend to release ubiquitin from a conjugated protein. They display similar catalytic domains containing conserved Cys and His boxes but divergent N-terminal and occasionally C-terminal extensions, which are thought to function in substrate recognition, subcellular localization, and protein-protein interactions.

USP19 Antibody (N-term) Blocking Peptide - References

Nagase, T., et al., DNA Res. 5(6):355-364 (1998).