

## SENP2 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP1232c

# **Specification**

### SENP2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

**Q9HC62** 

# SENP2 Antibody (C-term) Blocking Peptide - Additional Information

**Gene ID** 59343

#### **Other Names**

Sentrin-specific protease 2, Axam2, SMT3-specific isopeptidase 2, Smt3ip2, Sentrin/SUMO-specific protease SENP2, SENP2, KIAA1331

### **Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP1232c>AP1232c</a> was selected from the C-term region of human SENP2. 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.

## SENP2 Antibody (C-term) Blocking Peptide - Protein Information

Name SENP2 {ECO:0000303|PubMed:10718198, ECO:0000312|HGNC:HGNC:23116}

# **Function**

Protease that catalyzes two essential functions in the SUMO pathway (PubMed:<a href="http://www.uniprot.org/citations/11896061" target="\_blank">11896061</a>, PubMed:<a href="http://www.uniprot.org/citations/12192048" target="\_blank">12192048</a>, PubMed:<a href="http://www.uniprot.org/citations/20194620" target="\_blank">20194620</a>, PubMed:<a href="http://www.uniprot.org/citations/21965678" target="\_blank">21965678</a>, PubMed:<a href="http://www.uniprot.org/citations/15296745" target="\_blank">15296745</a>). The first is the hydrolysis of an alpha-linked peptide bond at the C-terminal end of the small ubiquitin- like modifier (SUMO) propeptides, SUMO1, SUMO2 and SUMO3 leading to the mature form of the proteins (PubMed:<a href="http://www.uniprot.org/citations/15296745" target="\_blank">15296745</a>). The second is the deconjugation of SUMO1, SUMO2 and SUMO3 from targeted proteins, by cleaving an epsilon-linked peptide bond between the C-terminal glycine



of the mature SUMO and the lysine epsilon-amino group of the target protein (PubMed:<a href="http://www.uniprot.org/citations/20194620" target="\_blank">20194620</a>, PubMed:<a href="http://www.uniprot.org/citations/21965678" target="\_blank">21965678</a>, PubMed:<a href="http://www.uniprot.org/citations/15296745" target="\_blank">15296745</a>). May down-regulate CTNNB1 levels and thereby modulate the Wnt pathway (By similarity). Deconjugates SUMO2 from MTA1 (PubMed:<a href="http://www.uniprot.org/citations/21965678" target="\_blank">21965678</a>). Plays a dynamic role in adipogenesis by desumoylating and promoting the stabilization of CEBPB (PubMed:<a

href="http://www.uniprot.org/citations/20194620" target="\_blank">20194620</a>). Acts as a regulator of the cGAS-STING pathway by catalyzing desumoylation of CGAS and STING1 during the late phase of viral infection (By similarity).

#### **Cellular Location**

Nucleus, nuclear pore complex. Nucleus membrane; Peripheral membrane protein; Nucleoplasmic side. Cytoplasm Note=Shuttles between cytoplasm and nucleus

### SENP2 Antibody (C-term) Blocking Peptide - Protocols

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

## Blocking Peptides

SENP2 Antibody (C-term) Blocking Peptide - Images

# SENP2 Antibody (C-term) Blocking Peptide - Background

SUMO is a small ubiquitin-like protein that can be covalently conjugated to other proteins. SENP2 is one of a group of enzymes that process newly synthesized SUMO1, SUMO2, and SUMO3 into the conjugatable mature forms and catalyze the deconjugation of these same SUMO proteins from their targeted substrates. SENP2 may also down-regulate CTNNB1 levels and thereby modulate the Wnt pathway.

## SENP2 Antibody (C-term) Blocking Peptide - References

Ota, T., et al., Nat. Genet. 36(1):40-45 (2004).Nakajima, D., et al., DNA Res. 9(3):99-106 (2002).Zhang, H., et al., Mol. Cell. Biol. 22(18):6498-6508 (2002).Hang, J., et al., J. Biol. Chem. 277(22):19961-19966 (2002).Nagase, T., et al., DNA Res. 7(1):65-73 (2000).