

SENP1 Rabbit mAb

Catalog # AP78034

Product Information

| | |
|--------------------------|--|
| Application | WB, IHC-P, IF, FC, ICC |
| Primary Accession | Q9P0U3 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Monoclonal Antibody |
| Isotype | IgG |
| Conjugate | Unconjugated |
| Immunogen | A synthesized peptide derived from human SENP1 |
| Purification | Affinity Chromatography |
| Calculated MW | 73481 |

Additional Information

| | |
|--------------------|--|
| Gene ID | 29843 |
| Other Names | SENP1 |
| Dilution | WB~1/500-1/1000 IHC-P~N/A IF~~1:50~200 FC~~1:10~50 ICC~~N/A |
| Format | Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol. |
| Storage | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |

Protein Information

| | |
|-----------------|--|
| Name | SENP1 |
| Function | Protease that catalyzes two essential functions in the SUMO pathway (PubMed: 10652325 , PubMed: 15199155 , PubMed: 15487983 , PubMed: 16253240 , PubMed: 16553580 , PubMed: 21829689 , PubMed: 21965678 , PubMed: 23160374 , PubMed: 24943844 , PubMed: 25406032 , PubMed: 29506078 , PubMed: 34048572 , PubMed: 37257451). 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: 15487983). 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: 15199155 , PubMed: 16253240 , PubMed: 21829689 , PubMed: 21965678 , PubMed: 23160374 , PubMed: 24943844 , PubMed: 25406032 , |

PubMed:[29506078](#), PubMed:[34048572](#), PubMed:[37257451](#)). Deconjugates SUMO1 from HIPK2 (PubMed:[16253240](#)). Deconjugates SUMO1 from HDAC1 and BHLHE40/DEC1, which decreases its transcriptional repression activity (PubMed:[15199155](#), PubMed:[21829689](#)). Deconjugates SUMO1 from CLOCK, which decreases its transcriptional activation activity (PubMed:[23160374](#)). Deconjugates SUMO2 from MTA1 (PubMed:[21965678](#)). Inhibits N(6)-methyladenosine (m6A) RNA methylation by mediating SUMO1 deconjugation from METTL3 and ALKBH5: METTL3 inhibits the m6A RNA methyltransferase activity, while ALKBH5 desumoylation promotes m6A demethylation (PubMed:[29506078](#), PubMed:[34048572](#), PubMed:[37257451](#)). Desumoylates CCAR2 which decreases its interaction with SIRT1 (PubMed:[25406032](#)). Deconjugates SUMO1 from GPS2 (PubMed:[24943844](#)).

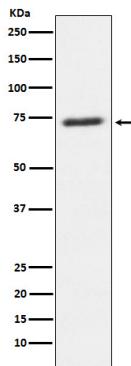
Cellular Location

Nucleus. Cytoplasm Note=Shuttles between cytoplasm and nucleus

Tissue Location

Highly expressed in testis. Expressed at lower levels in thymus, pancreas, spleen, liver, ovary and small intestine

Images



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.