

**USP5 Antibody**  
**Rabbit mAb**  
**Catalog # AP93228****Specification**

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**USP5 Antibody - Product Information**

|                    |                        |
|--------------------|------------------------|
| Application        | WB, ICC                |
| Primary Accession  | <a href="#">P45974</a> |
| Reactivity         | Rat                    |
| Clonality          | Monoclonal             |
| <b>Other Names</b> |                        |
| ISOT; Usp5;        |                        |
| Isotype            | Rabbit IgG             |
| Host               | Rabbit                 |
| Calculated MW      | 95786 Da               |

**USP5 Antibody - Additional Information**

|                              |   |
|------------------------------|---|
| Dilution                     | WB~~1:1000<br>ICC~~N/A  |
| Purification                 | Affinity-chromatography   |
| Immunogen                    | A synthesized peptide derived from human USP5   |
| Description                  | Cleaves linear and branched multiubiquitin polymers with a marked preference for branched polymers. Involved in unanchored 'Lys-48'-linked polyubiquitin disassembly.             |
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

**USP5 Antibody - Protein Information****Name** USP5**Synonyms** ISOT**Function**

Deubiquitinating enzyme that participates in a wide range of cellular processes by specifically cleaving isopeptide bonds between ubiquitin and substrate proteins or ubiquitin itself. Affects thereby important cellular signaling pathways such as NF-kappa-B, Wnt/beta- catenin, and cytokine production by regulating ubiquitin-dependent protein degradation. Participates in the activation of the Wnt signaling pathway by promoting FOXM1 deubiquitination and stabilization that induces the recruitment of beta-catenin to Wnt target gene promoter (PubMed:<a href="http://www.uniprot.org/citations/26912724" target="\_blank">26912724</a>). Regulates

the assembly and disassembly of heat-induced stress granules by mediating the hydrolysis of unanchored ubiquitin chains (PubMed:<a href="http://www.uniprot.org/citations/29567855" target="\_blank">29567855</a>). Promotes lipopolysaccharide-induced apoptosis and inflammatory response by stabilizing the TXNIP protein (PubMed:<a href="http://www.uniprot.org/citations/37534934" target="\_blank">37534934</a>). Affects T-cell biology by stabilizing the inhibitory receptor on T-cells PDC1 (PubMed:<a href="http://www.uniprot.org/citations/37208329" target="\_blank">37208329</a>). Acts as a negative regulator of autophagy by regulating ULK1 at both protein and mRNA levels (PubMed:<a href="http://www.uniprot.org/citations/37607937" target="\_blank">37607937</a>). Acts also as a negative regulator of type I interferon production by simultaneously removing both 'Lys-48'-linked unanchored and 'Lys-63'-linked anchored polyubiquitin chains on the transcription factor IRF3 (PubMed:<a href="http://www.uniprot.org/citations/39761299" target="\_blank">39761299</a>). Modulates the stability of DNA mismatch repair protein MLH1 and counteracts the effect of the ubiquitin ligase UBR4 (PubMed:<a href="http://www.uniprot.org/citations/39032648" target="\_blank">39032648</a>). Upon activation by insulin, it gets phosphorylated through mTORC1-mediated phosphorylation to enhance YTHDF1 stability by removing 'Lys-11'-linked polyubiquitination (PubMed:<a href="http://www.uniprot.org/citations/39900921" target="\_blank">39900921</a>). May also deubiquitinate other substrates such as the calcium channel CACNA1H (By similarity).

**Cellular Location**

Cytoplasm. Cytoplasm, Stress granule. Nucleus

**USP5 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**USP5 Antibody - Images**