

**USP25 Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV11136****Specification**

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**USP25 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q9UHP3</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	122218

**USP25 Antibody - Additional Information****Gene ID** 29761Positive Control  
Application & Usage**Western Blot: BxPC-3 cell lysate**  
**Western blot: 1:500 - 1:1000 dilution.**  
**However, the optimal conditions should be determined individually.****Other Names**  
USP25, USP21**Target/Specificity**  
USP25**Antibody Form**  
Liquid**Appearance**  
Colorless liquid**Formulation**  
100 µg of antibody in 100 µl PBS containing 0.02% sodium azide, 50% glycerol, pH 7.3**Handling**  
The antibody solution should be gently mixed before use.**Reconstitution & Storage**  
-20 °C**Background Descriptions****Precautions**  
USP25 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## USP25 Antibody - Protein Information

**Name** USP25

**Synonyms** USP21

### Function

Deubiquitinating enzyme that hydrolyzes ubiquitin moieties conjugated to substrates and thus, functions in various biological processes including inflammation, immune response (PubMed:<a href="http://www.uniprot.org/citations/29518389" target="\_blank">29518389</a>, PubMed:<a href="http://www.uniprot.org/citations/37683630" target="\_blank">37683630</a>). Modulates the Wnt/beta-catenin pathway by deubiquitinating and stabilizing tankyrases TNKS1 and TNKS2 (PubMed:<a href="http://www.uniprot.org/citations/28619731" target="\_blank">28619731</a>, PubMed:<a href="http://www.uniprot.org/citations/30926243" target="\_blank">30926243</a>). Regulates KEAP1-NRF2 axis in the defense against oxidative assaults by deubiquitinating KEAP1 and protecting it from degradation leading to degradation of the NRF2 transcription factor that is responsible for mounting an anti-oxidation gene expression program (PubMed:<a href="http://www.uniprot.org/citations/37339955" target="\_blank">37339955</a>). Positively regulates RNA virus-induced innate signaling by interacting with and deubiquitinating ERLIN1 and ERLIN2 (PubMed:<a href="http://www.uniprot.org/citations/37683630" target="\_blank">37683630</a>). In turn, restricts virus production by regulating cholesterol biosynthetic flux (PubMed:<a href="http://www.uniprot.org/citations/37683630" target="\_blank">37683630</a>). Acts as a negative regulator of interleukin-17- mediated signaling and inflammation through the removal of 'Lys-63'- linked ubiquitination of TRAF5 and TRAF6 (PubMed:<a href="http://www.uniprot.org/citations/23042150" target="\_blank">23042150</a>). Prevents the ubiquitination and degradation of TRAF3 to reduce the phosphorylation levels of JNK and P38, the secretion of IL-1B and to induce endotoxin tolerance (PubMed:<a href="http://www.uniprot.org/citations/30579117" target="\_blank">30579117</a>).

### Cellular Location

Cytoplasm

### Tissue Location

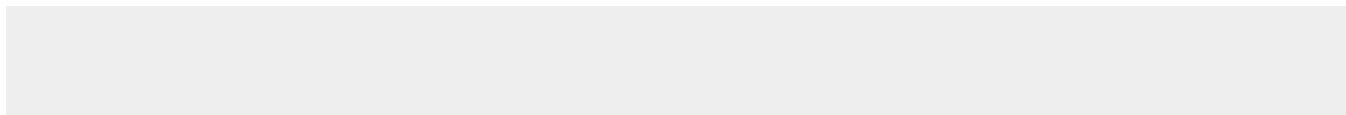
Isoform USP25a is found in most adult and fetal tissues; expression is moderately high in testis, pancreas, kidney, skeletal muscle, liver, lung, placenta, brain, heart, but very low in peripheral blood, colon, small intestine, ovary, prostate, thymus and spleen. Isoform USP25b is found in all tissues except heart and skeletal muscle. Isoform USP25m is heart and skeletal muscle specific

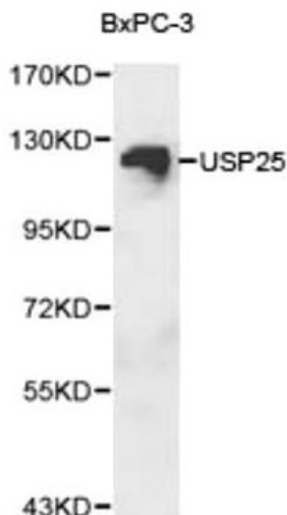
## USP25 Antibody - Protocols

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](#)

## USP25 Antibody - Images





WB of BxPC-3 cell lysate with USP25 pAb.

### **USP25 Antibody - Background**

Ubiquitinating enzymes (UBEs) catalyze protein ubiquitination, a reversible process countered by deubiquitinating enzymes (DUB) action. There are five DUB subfamilies including the USP, UCH, OTU, MJD, and JAMM enzymes. USP25 (ubiquitin specific peptidase 25), also known as USP21, is a 1087 amino acid member of the peptidase C19 family. Expressed at high amounts in pancreas, kidney, skeletal muscle, testis, liver, heart, brain and lung, USP25 associates with the 26S proteasome and functions as a deubiquitinating enzyme in the Ub proteolytic pathway. Due to alternative splicing events, USP25 is expressed as two short, ubiquitously expressed isoforms and one long, muscle specific isoform. The long isoform of USP25 is upregulated in myogenesis and is implicated in the pathogenesis of severe myopathies.