

Anti-USP37 Antibody
Rabbit Polyclonal antibody
Catalog # ABV11883**Specification**

Anti-USP37 Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB |
| Primary Accession | Q86T82 |
| Reactivity | Human, Mouse, Rat |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Calculated MW | 110170 |

Anti-USP37 Antibody - Additional Information**Gene ID** 57695

| | |
|---------------------|--|
| Positive Control | WB: HeLa, mouse brain, rat brain lysates |
| Application & Usage | WB; 1:500 - 1:2000 |
| Alias Symbol | USP37 |

Other Names

KIAA1594, Ubiquitin carboxyl-terminal hydrolase 37, Deubiquitinating enzyme 37, Ubiquitin thioesterase 37, Ubiquitin-specific-processing protease 37

Formulation

In 0.42% Potassium phosphate; 0.87% Sodium chloride; pH 7.3; 30% glycerol and 0.01% sodium azide

Reconstitution & Storage

12 months under -20°C

Background Descriptions**Precautions**

Anti-USP37 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-USP37 Antibody - Protein Information**Name** USP37**Synonyms** KIAA1594**Function**

Deubiquitinase that plays a role in different processes including cell cycle regulation, DNA replication or DNA damage response (PubMed:<a

[26299517](http://www.uniprot.org/citations/26299517), PubMed: [27296872](http://www.uniprot.org/citations/27296872), PubMed: [31911859](http://www.uniprot.org/citations/31911859), PubMed: [34509474](http://www.uniprot.org/citations/34509474)). Antagonizes the anaphase-promoting complex (APC/C) during G1/S transition by mediating deubiquitination of cyclin-A (CCNA1 and CCNA2), thereby promoting S phase entry. Specifically mediates deubiquitination of 'Lys-11'-linked polyubiquitin chains, a specific ubiquitin-linkage type mediated by the APC/C complex. Phosphorylation at Ser-628 during G1/S phase maximizes the deubiquitinase activity, leading to prevent degradation of cyclin-A (CCNA1 and CCNA2) (PubMed: [21596315](http://www.uniprot.org/citations/21596315)). Plays an important role in the regulation of DNA replication by stabilizing the licensing factor CDT1 (PubMed: [27296872](http://www.uniprot.org/citations/27296872)). Also plays an essential role beyond S-phase entry to promote the efficiency and fidelity of replication by deubiquitinating checkpoint kinase 1/CHK1, promoting its stability (PubMed: [34509474](http://www.uniprot.org/citations/34509474)). Sustains the DNA damage response (DDR) by deubiquitinating and stabilizing the ATP-dependent DNA helicase BLM (PubMed: [34606619](http://www.uniprot.org/citations/34606619)). Mechanistically, DNA double-strand breaks (DSB) promotes ATM-mediated phosphorylation of USP37 and enhances the binding between USP37 and BLM (PubMed: [34606619](http://www.uniprot.org/citations/34606619)). Promotes cell migration by deubiquitinating and stabilizing the epithelial-mesenchymal transition (EMT)-inducing transcription factor SNAI (PubMed: [31911859](http://www.uniprot.org/citations/31911859)). Plays a role in the regulation of mitotic spindle assembly and mitotic progression by associating with chromatin-associated WAPL and stabilizing it through deubiquitination (PubMed: [26299517](http://www.uniprot.org/citations/26299517)).

Cellular Location

Nucleus. Chromosome

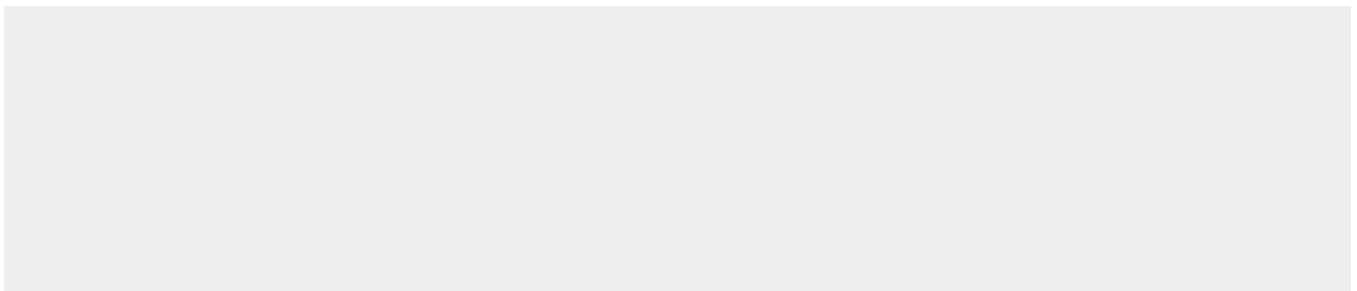
Tissue Location

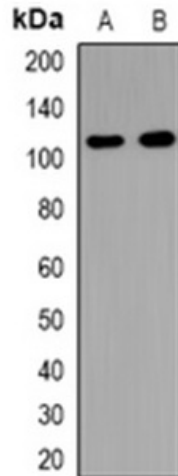
Expressed in brain and prostate.

Anti-USP37 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](#)

Anti-USP37 Antibody - Images



Western blot analysis of USP37 expression in HeLa(A), mouse brain(B) whole cell lysates.

Anti-USP37 Antibody - Background

Deubiquitinase that antagonizes the anaphase-promoting complex (APC/C) during G1/S transition by mediating deubiquitination of cyclin-A (CCNA1 and CCNA2), thereby promoting S phase entry. Specifically mediates deubiquitination of 'Lys-11'-linked polyubiquitin chains, a specific ubiquitin-linkage type mediated by the APC/C complex. Also mediates deubiquitination of 'Lys-48'-linked polyubiquitin chains in vitro. Phosphorylation at Ser-628 during G1/S phase maximizes the deubiquitinase activity, leading to prevent degradation of cyclin-A (CCNA1 and CCNA2).