

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 lystes

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



href="http://www.uniprot.org/citations/26299517" target=" blank">26299517, PubMed:27296872, PubMed:31911859, PubMed: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). Plays an important role in the regulation of DNA replication by stabilizing the licensing factor CDT1 (PubMed:27296872). Plays also 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). Sustains the DNA damage response (DDR) by deubiquitinating and stabilizing the ATP-dependent DNA helicase BLM (PubMed:34606619). Mechanistically, DNA double-strand breaks (DSB) promotes ATM-mediated phosphorylation of USP37 and enhances the binding between USP37 and BLM (PubMed:34606619). Promotes cell migration by deubiquitinating and stabilizing the epithelial-mesenchymal transition (EMT)-inducing transcription factor SNAI (PubMed: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).

Cellular LocationNucleus, Chromosome

Tissue Location

Expressed in brain and prostate.

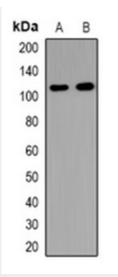
Anti-USP37 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- 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).