

## **USP28 Antibody (Internal)**

Goat Polyclonal Antibody Catalog # ALS14572

### **Specification**

#### **USP28 Antibody (Internal) - Product Information**

Application IHC
Primary Accession Q96RU2

Reactivity Human, Rabbit, Monkey, Pig, Horse,

**Bovine**, Dog

Host Goat
Clonality Polyclonal
Calculated MW 122kDa KDa

## **USP28 Antibody (Internal) - Additional Information**

#### **Gene ID 57646**

## **Other Names**

Ubiquitin carboxyl-terminal hydrolase 28, 3.4.19.12, Deubiquitinating enzyme 28, Ubiquitin thioesterase 28, Ubiquitin-specific-processing protease 28, USP28, KIAA1515

# **Target/Specificity**

Human USP28.

## **Reconstitution & Storage**

Store at -20°C. Minimize freezing and thawing.

### **Precautions**

USP28 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **USP28 Antibody (Internal) - Protein Information**

#### Name USP28

## **Synonyms** KIAA1515

#### **Function**

Deubiquitinase involved in DNA damage response checkpoint and MYC proto-oncogene stability. Involved in DNA damage induced apoptosis by specifically deubiquitinating proteins of the DNA damage pathway such as CLSPN. Also involved in G2 DNA damage checkpoint, by deubiquitinating CLSPN, and preventing its degradation by the anaphase promoting complex/cyclosome (APC/C). In contrast, it does not deubiquitinate PLK1. Specifically deubiquitinates MYC in the nucleoplasm, leading to prevent MYC degradation by the proteasome: acts by specifically interacting with isoform 1 of FBXW7 (FBW7alpha) in the nucleoplasm and counteracting ubiquitination of MYC by the SCF(FBW7) complex. In contrast, it does not interact with isoform 4 of FBXW7 (FBW7gamma) in the nucleolus, allowing MYC degradation and explaining the selective MYC degradation in the



nucleolus. Deubiquitinates ZNF304, hence preventing ZNF304 degradation by the proteasome and leading to the activated KRAS-mediated promoter hypermethylation and transcriptional silencing of tumor suppressor genes (TSGs) in a subset of colorectal cancers (CRC) cells (PubMed:<a href="http://www.uniprot.org/citations/24623306" target="\_blank">24623306</a>).

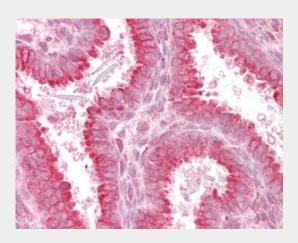
**Cellular Location** Nucleus, nucleoplasm

## **USP28 Antibody (Internal) - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## **USP28 Antibody (Internal) - Images**



Anti-USP28 antibody IHC of human uterus.

## **USP28 Antibody (Internal) - Background**

Deubiquitinase involved in DNA damage response checkpoint and MYC proto-oncogene stability. Involved in DNA damage induced apoptosis by specifically deubiquitinating proteins of the DNA damage pathway such as CLSPN. Also involved in G2 DNA damage checkpoint, by deubiquitinating CLSPN, and preventing its degradation by the anaphase promoting complex/cyclosome (APC/C). In contrast, it does not deubiquitinate PLK1. Specifically deubiquitinates MYC in the nucleoplasm, leading to prevent MYC degradation by the proteasome: acts by specifically interacting with isoform 1 of FBXW7 (FBW7alpha) in the nucleoplasm and counteracting ubiquitination of MYC by the SCF(FBW7) complex. In contrast, it does not interact with isoform 4 of FBXW7 (FBW7gamma) in the nucleolus, allowing MYC degradation and explaining the selective MYC degradation in the nucleolus.

## **USP28 Antibody (Internal) - References**

Valero R., et al. Genome Biol. 2:RESEARCH0043.1-RESEARCH0043.10(2001).





Taylor T.D., et al. Nature 440:497-500(2006). Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Nagase T., et al. DNA Res. 7:143-150(2000). Zhang D., et al. Cell 126:529-542(2006).