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Anti-USP28 Antibody

Catalog # AP60942

Product Information

Application	WB, IHC
Primary Accession	Q96RU2
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	122491

Additional Information

Gene ID	57646
Other Names	KIAA1515; Ubiquitin carboxyl-terminal hydrolase 28; Deubiquitinating enzyme 28; Ubiquitin thioesterase 28; Ubiquitin-specific-processing protease 28
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human USP28. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

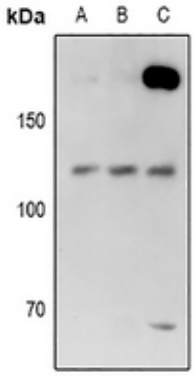
Protein Information

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

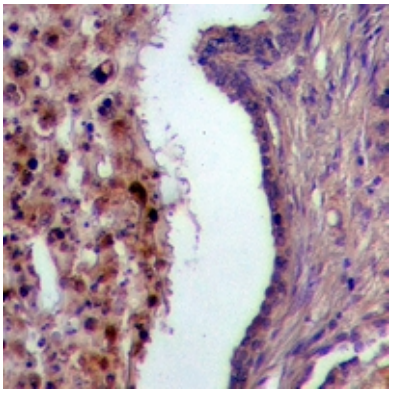
proteasome and leading to the activated KRAS-mediated promoter hypermethylation and transcriptional silencing of tumor suppressor genes (TSGs) in a subset of colorectal cancers (CRC) cells (PubMed:24623306).

Cellular Location Nucleus, nucleoplasm

Images



Western blot analysis of USP28 expression in HEK293T (A), A549 (B), mouse heart (C) whole cell lysates. (Predicted band size: 122 kD; Observed band size: 122 kD)



Immunohistochemical analysis of USP28 staining in human prostate formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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