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USP4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14657a

Specification

USP4 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q13107
Other Accession	NP_003354.2, NP_955475.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**108565**
Antigen Region	**1-30**

USP4 Antibody (N-term) - Additional Information

Gene ID 7375

Other Names
Ubiquitin carboxyl-terminal hydrolase 4, Deubiquitinating enzyme 4, Ubiquitin thioesterase 4, Ubiquitin-specific-processing protease 4, Ubiquitous nuclear protein homolog, USP4, UNP, UNPH

Target/Specificity
This USP4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human USP4.

Dilution
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
USP4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

USP4 Antibody (N-term) - Protein Information

Name USP4 {ECO:0000303|PubMed:30514904, ECO:0000312|HGNC:HGNC:12627}

Function Deubiquitinating enzyme that removes conjugated ubiquitin from target proteins (PubMed:16316627, PubMed:16339847, PubMed:16472766, PubMed:20595234, PubMed:22347420, PubMed:25404403, PubMed:28604766, PubMed:30514904). Deubiquitinates PDPK1 (PubMed:22347420). Deubiquitinates TRIM21 (PubMed:16316627). Deubiquitinates receptor ADORA2A which increases the amount of functional receptor at the cell surface (PubMed:16339847). Deubiquitinates HAS2 (PubMed:28604766). Deubiquitinates RHEB in response to EGF signaling, promoting mTORC1 signaling (PubMed:30514904). May regulate mRNA splicing through deubiquitination of the U4 spliceosomal protein PRPF3 (PubMed:20595234). This may prevent its recognition by the U5 component PRPF8 thereby destabilizing interactions within the U4/U6.U5 snRNP (PubMed:20595234). May also play a role in the regulation of quality control in the ER (PubMed:16339847).

Cellular Location
Cytoplasm. Nucleus. Note=Shuttles between the nucleus and cytoplasm. Exported to the cytoplasm in a CRM1-dependent manner and recycled back to the nucleus via the importin alpha/beta heterodimeric import receptor. The relative amounts found in the nucleus and cytoplasm vary according to the cell type

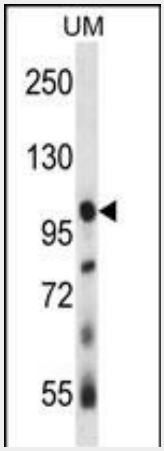
Tissue Location
Overexpressed in small cell tumors and adenocarcinomas of the lung compared to wild-type lung (at protein level). Expressed in the hippocampal neurons

USP4 Antibody (N-term) - 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

USP4 Antibody (N-term) - Images



USP4 Antibody (N-term) (Cat. #AP14657a) western blot analysis in human uterine tumor tissue lysates (35ug/lane).This demonstrates the USP4 antibody detected the USP4 protein (arrow).

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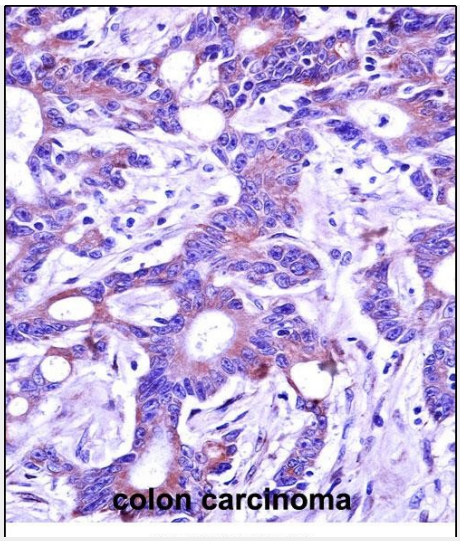

USP4 Antibody (N-term) (AP14657a)immunohistochemistry analysis in formalin fixed and paraffin embedded human colon carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of USP4 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

USP4 Antibody (N-term) - Background

Hydrolase that deubiquitinates target proteins such as the receptor ADORA2A and TRIM21. Deubiquitination of ADORA2A increases the amount of functional receptor at the cell surface. Plays a role in the regulation of quality control in the ER.

USP4 Antibody (N-term) - References

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