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USP48 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI12499

Product Information

Application	WB
Primary Accession	Q86UV5
Other Accession	NM_001032730, AAH67261
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Chicken, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	119032

Additional Information

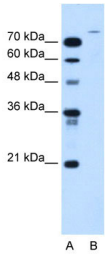
Gene ID	84196
Alias Symbol	USP31, RAP1GA1
Other Names	Ubiquitin carboxyl-terminal hydrolase 48, 3.4.19.12, Deubiquitinating enzyme 48, Ubiquitin thioesterase 48, Ubiquitin-specific-processing protease 48, USP48, USP31
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 100 ul of distilled water. Final anti-USP48 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	USP48 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	USP48
Synonyms	USP31
Function	Deubiquitinase that recognizes and hydrolyzes the peptide bond at the C-terminal Gly of ubiquitin. Involved in the processing of polyubiquitin precursors as well as that of ubiquitinated proteins (PubMed:16214042, PubMed:34059922). Plays a role in the regulation of NF-kappa-B activation by TNF receptor superfamily via its interactions with RELA and TRAF2. May also play a regulatory role at postsynaptic sites. Plays an important role in cell cycle progression by deubiquitinating Aurora B/AURKB and thereby extending

	its stability (PubMed:34445214). In the context of H.pylori infection, stabilizes nuclear RELA through deubiquitination, thereby promoting the transcriptional activity of RELA to prolong TNFAIP3 de novo synthesis. Consequently, TNFAIP3 suppresses caspase activity and apoptotic cell death (PubMed:35913642). Also functions in the modulation of the ciliary and synaptic transport as well as cytoskeleton organization, which are key for photoreceptor function and homeostasis. To achieve this, stabilizes the levels of the retinal degeneration-associated proteins ARL3 and UNC119 using distinct mechanisms (PubMed:36293380). Plays a positive role in pyroptosis by stabilizing gasdermin E/GSDME through removal of its 'Lys-48'-linked ubiquitination (PubMed:36607699).
Cellular Location	Cytoplasm. Nucleus. Cell projection, cilium
Tissue Location	Widely expressed. Expressed in the fetal inner ear (PubMed:34059922).

Images



WB Suggested Anti-USP48 Antibody Titration: 2.5µg/ml
Positive Control: HepG2 cell lysate
USP48 is strongly supported by BioGPS gene expression data to be expressed in Human HepG2 cells

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.