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Usp12 Antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI13857

Product Information

Application	WB
Primary Accession	Q9D9M2
Other Accession	NM_011669, NP_035799
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42914

Additional Information

Gene ID	22217
Alias Symbol	Ubh1
Other Names	Ubiquitin carboxyl-terminal hydrolase 12, 3.4.19.12, Deubiquitinating enzyme 12, Ubiquitin thioesterase 12, Ubiquitin-hydrolyzing enzyme 1, Ubiquitin-specific-processing protease 12, Usp12, Ubh1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Usp12 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	Usp12 Antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Usp12
Synonyms	Ubh1
Function	Deubiquitinating enzyme that plays various roles in the regulation of the immune response and inflammation. During TCR engagement and activation, translocates into the cytoplasm and deubiquitinates its substrates LAT and TRAT1 and prevents their lysosome-dependent degradation to stabilize the TCR signaling complex at the plasma membrane. Plays an essential role in the selective LPS- induced macrophage response through the activation of NF-kappa-B pathway. In addition, promotes that antiviral immune response

through targeting DNA sensor IFI16 to inhibit its proteasome-dependent degradation. Participates in the interferon signaling pathway and antiviral response independently of its deubiquitinase activity by maintaining nuclear phosphorylated STAT1 levels via inhibition of its CREBBP-mediated acetylation and subsequent dephosphorylation (By similarity). Plays an intrinsic role in promoting the differentiation, activation and proliferation of CD4(+) T-cell by activating the NF- kappa-B signaling pathway through deubiquitinating and stabilizing B- cell lymphoma/leukemia 10/BCL10 (PubMed:33941870). In myeloid-derived suppressor cells promotes the activation of the NF-kappa-B via deubiquitination and stabilization of RELA (PubMed:35898171). Regulates the 'Lys-63'-linked polyubiquitin chains of BAX and thereby modulates the mitochondrial apoptotic process (By similarity). Negative regulator of NOTCH signaling that specifically deubiquitinates non-activated NOTCH receptors to target them for lysosomal degradation; deubiquitination of NOTCH stimulates its transport form late endosomes to lysosomes (PubMed:22778262). Protects neurons against HTT/huntingtin-induced polyglutamine expansion-dependent neurodegeneration through regulation of autophagic flux (By similarity). This function is independent of deubiquitinase activity or of other components of the USP12-WDR20-WDR48 deubiquitinating complex (By similarity). In complex with WDR48, acts as a potential tumor suppressor by positively regulating PHLPP1 stability (By similarity).

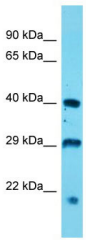
Cellular Location

Nucleus {ECO:0000250|UniProtKB:O75317}. Cytoplasm {ECO:0000250|UniProtKB:O75317}. Cell membrane {ECO:0000250|UniProtKB:O75317}. Note=Translocates from the nucleus to the cytosol on TCR stimulation, while it translocates into the nucleus in IFN signaling. USP12/WDR20/WDR48 complex is localized mainly to the plasma membrane. {ECO:0000250|UniProtKB:O75317}

References

Carninci P.,et al.Science 309:1559-1563(2005).
Baek K.-H.,et al.DNA Seq. 13:145-148(2002).

Images



Host: Rabbit
Target Name: Usp12
Sample Tissue: Mouse Stomach lysates
Antibody Dilution: 1.0µg/ml

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