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USP15 Recombinant Mouse mAb

Catalog # AP96475

Product Information

Application	WB
Reactivity	Rat, Human
Predicted	Mouse
Host	Mouse
Clonality	Recombinant
Physical State	Liquid
Isotype	IgG1, Kappa
Purity	affinity purified by Protein G
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the peptidase C19 family. Contains 1 DUSP domain.
SUBUNIT	A homodimer structure has been reported; however it is unclear whether the protein form a homodimer in vivo (PubMed:22001210). Identified in a complex with the COP9 signalosome complex (CSN). Interacts with SMAD1, SMAD2 and SMAD3; the interaction is direct. Forms a complex with SMURF2 and SMAD7. Interacts with TGFBR1. Interacts with SART3; the interaction is direct. May interact with RNF20 and RNF40. Interacts with human papillomavirus type 16 protein E6
Post-translational modifications	Phosphorylated. Phosphorylation protects against ubiquitination and subsequent degradation by the proteasome. Ubiquitinated, leading to degradation by the proteasome.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Additional Information

Other Names	UNP; UNPH-2; UNPH4; 4921514G19Rik; E430033I05Rik; Gcap18; Ubp109; UBP15_HUMAN; USP15; Deubiquitinating enzyme 15; Ubiquitin thioesterase 15; Ubiquitin-specific-processing protease 15; 3.4.19.12; KIAA0529; UBP15_MOUSE; ubiquitin specific peptidase 15; ubiquitin specific protease 15
Dilution	WB=1:500-2000,ICC/IF=1:50-200
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Name	USP15 Recombinant Mouse mAb
Function	Hydrolase that removes conjugated ubiquitin from target proteins and regulates various pathways such as the TGF-beta receptor signaling and NF-kappa-B pathways. Acts as a key regulator of TGF-beta receptor signaling pathway, but the precise mechanism is still unclear: according to a report, acts by promoting deubiquitination of monoubiquitinated R-SMADs (SMAD1, SMAD2 and/or SMAD3), thereby alleviating inhibition of R-SMADs and

promoting activation of TGF-beta target genes (PubMed:21947082). According to another reports, regulates the TGF-beta receptor signaling pathway by mediating deubiquitination and stabilization of TGFBR1, leading to an enhanced TGF-beta signal (PubMed:22344298). Able to mediate deubiquitination of monoubiquitinated substrates as well as 'Lys-48'-linked polyubiquitin chains, protecting them against proteasomal degradation. May also regulate gene expression and/or DNA repair through the deubiquitination of histone H2B (PubMed:24526689). Acts as an associated component of COP9 signalosome complex (CSN) and regulates different pathways via this association: regulates NF-kappa-B by mediating deubiquitination of NFKBIA and deubiquitinates substrates bound to VCP. Protects APC and human papillomavirus type 16 protein E6 against degradation via the ubiquitin proteasome pathway.

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