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Anti-USP38 Antibody

Catalog # AP60649

Product Information

Application	WB
Primary Accession	Q8NB14
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	116546

Additional Information

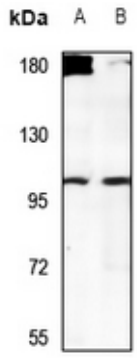
Gene ID	84640
Other Names	KIAA1891; Ubiquitin carboxyl-terminal hydrolase 38; Deubiquitinating enzyme 38; HP43.8KD; Ubiquitin thioesterase 38; Ubiquitin-specific-processing protease 38
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human USP38. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000)
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	USP38
Synonyms	KIAA1891
Function	Deubiquitinating enzyme that plays a role in various cellular processes, including DNA repair, cell cycle regulation, and immune response (PubMed:22689415, PubMed:30497519, PubMed:31874856, PubMed:35238669). Plays a role in the inhibition of type I interferon signaling by mediating the 'Lys-33' to 'Lys-48' ubiquitination transition of TBK1 leading to its degradation (PubMed:27692986). Cleaves the ubiquitin chain from the histone demethylase LSD1/KDM1A and prevents it from degradation by the 26S proteasome, thus maintaining LSD1 protein level in cells (PubMed:30497519). Plays a role in the DNA damage response by regulating the deacetylase activity of HDAC1 (PubMed:31874856). Mechanistically, removes the 'Lys-63'-linked ubiquitin chain promoting the deacetylase activity of HDAC1 in response to DNA damage (PubMed:31874856). Also acts as a

	specific deubiquitinase of histone deacetylase 3/HDAC3 and cleaves its 'Lys-63'-linked ubiquitin chains to lower its histone deacetylase activity (PubMed:32404892). Regulates MYC levels and cell proliferation via antagonizing ubiquitin E3 ligase FBXW7 thereby preventing MYC 'Lys-48'-linked ubiquitination and degradation (PubMed:34102342). Participates in antiviral response by removing both 'Lys-48'-linked and 'Lys-63'- linked polyubiquitination of Zika virus envelope protein E (PubMed:34696459). Constitutively associated with IL-33R/IL1RL1, deconjugates its 'Lys-27'-linked polyubiquitination resulting in its autophagic degradation (PubMed:35238669).
Cellular Location	Cytoplasm. Nucleus Note=In response to DNA damage, recruited to DNA damage sites in the nucleus.
Tissue Location	Highly expressed in skeletal muscle. Expressed in adrenal gland.

Images



Western blot analysis of USP38 expression in A549 (A), PC12 (B) whole cell lysates. (Predicted band size: 116 kD; Observed band size: 117 kD)

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