10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# USP38 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI14382

## Product Information

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| **Application** | WB |
| **Primary Accession** | Q8NB14 |
| **Other Accession** | NM_032557, NP_115946 |
| **Reactivity** | Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine |
| **Predicted** | Human, Mouse, Rabbit, Dog, Horse, Bovine |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 116546 |

## Additional Information

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| **Gene ID** | 84640 |
| **Alias Symbol** | FLJ35970, HP43.8KD, KIAA1891 |
| **Other Names** | Ubiquitin carboxyl-terminal hydrolase 38, 3.4.19.12, Deubiquitinating enzyme 38, HP43.8KD, Ubiquitin thioesterase 38, Ubiquitin-specific-processing protease 38, USP38, KIAA1891 |
| **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-USP38 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** | USP38 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

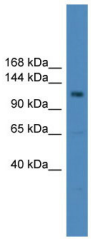
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| **Name** | USP38 |
| **Synonyms** | KIAA1891 |
| **Function** | Deubiquitinating enzyme that plays a role in various cellular processes, including DNA repair, cell cycle regulation, and immune response (PubMed:22689415, PubMed:30497519, PubMed:31874856, 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 |

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| | 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. |

## References


Ota T.,et al.Nat. Genet. 36:40-45(2004).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Hillier L.W.,et al.Nature 434:724-731(2005).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Nagase T.,et al.DNA Res. 8:179-187(2001).


## Images




WB Suggested Anti-USP38 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:1562500
Positive Control: HepG2 cell lysate


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