

UBE3C Polyclonal Antibody

Catalog # AP72985

Product Information

| Application | WB |
|-------------------|---------------|
| Primary Accession | <u>Q15386</u> |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 123923 |

Additional Information

| Gene ID | 9690 |
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| Other Names | UBE3C; KIAA0010; KIAA10; Ubiquitin-protein ligase E3C; HectH2 |
| Dilution | WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications. |
| Format | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| Storage Conditions | -20°C |

Protein Information

| Name | UBE3C {ECO:0000303 PubMed:17323924, ECO:0000312 HGNC:HGNC:16803} |
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| Function | E3 ubiquitin-protein ligase that specifically catalyzes 'Lys- 29'- and 'Lys-48'-linked polyubiquitin chains (PubMed: <u>11278995</u> , PubMed: <u>12692129</u> , PubMed: <u>16341092</u> , PubMed: <u>16601690</u> , PubMed: <u>24158444</u> , PubMed: <u>24811749</u> , PubMed: <u>25752573</u> , PubMed: <u>25752577</u> , PubMed: <u>32039437</u> , PubMed: <u>33637724</u> , PubMed: <u>34239127</u>). Accepts ubiquitin from the E2 ubiquitin-conjugating enzyme UBE2D1 in the form of a thioester and then directly transfers the ubiquitin to targeted substrates (PubMed: <u>32039437</u> , PubMed: <u>9575161</u>). Associates with the proteasome and promotes elongation of ubiquitin chains on substrates bound to the 26S proteasome (PubMed: <u>24158444</u> , PubMed: <u>28396413</u> , PubMed: <u>31375563</u>). Also catalyzes 'Lys-29'- and 'Lys-48'-linked ubiquitination of 26S proteasome subunit ADRM1/RPN13 in response to proteotoxic stress, impairing the ability of the proteasome to bind and degrade ubiquitin- conjugated proteins (PubMed: <u>24811749</u> , PubMed: <u>31375563</u>). Acts as a negative regulator of autophagy by mediating 'Lys-29'- and 'Lys-48'- linked ubiquitination of PIK3C3/VPS34, promoting its degradation (PubMed: <u>33637724</u>). Can assemble unanchored poly-ubiquitin chains in either 'Lys-29'- or 'Lys-48'-linked |

| | polyubiquitin chains; with some preference for 'Lys-48' linkages (PubMed: <u>11278995</u> , PubMed: <u>16601690</u> , PubMed: <u>25752577</u>). Acts as a negative regulator of type I interferon by mediating 'Lys-48'-linked ubiquitination of IRF3 and IRF7, leading to their degradation by the proteasome (PubMed: <u>21167755</u>). Catalyzes ubiquitination and degradation of CAND2 (PubMed: <u>12692129</u>). |
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| Tissue Location | Highly expressed in skeletal muscle. Detected at much lower levels in kidney and pancreas. |

Background

E3 ubiquitin-protein ligase that accepts ubiquitin from the E2 ubiquitin-conjugating enzyme UBE2D1 in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Can assemble unanchored poly-ubiquitin chains in either 'Lys-29'- or 'Lys-48'-linked polyubiquitin chains. Has preference for 'Lys-48' linkages. It can target itself for ubiquitination in vitro and may promote its own degradation in vivo.

Images



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