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UBE3C Blocking Peptide (Center)

Synthetic peptide
Catalog # BP20457c

Specification

UBE3C Blocking Peptide (Center) - Product Information

Primary Accession Q15386

UBE3C Blocking Peptide (Center) - Additional Information

Gene ID 9690

Other Names
Ubiquitin-protein ligase E3C, 632-, HectH2, UBE3C, KIAA0010, KIAA10

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

UBE3C Blocking Peptide (Center) - Protein Information

Name UBE3C {ECO:0000303|PubMed:17323924, ECO:0000312|HGNC:HGNC:16803}

Function
E3 ubiquitin-protein ligase that specifically catalyzes 'Lys- 29'- and 'Lys-48'-linked polyubiquitin chains (PubMed:11278995, PubMed:12692129, PubMed:16341092, PubMed:16601690, PubMed:24811749, PubMed:24158444, PubMed:25752573, PubMed:25752577, PubMed:34239127, PubMed:33637724, PubMed:32039437). 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:9575161, PubMed:32039437). Associates with the proteasome and promotes elongation of ubiquitin chains on substrates bound to the 26S proteasome (PubMed:<a href="http://www.uniprot.org/citations/24158444"

target="_blank">24158444, PubMed:28396413, PubMed:31375563). 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:24811749, PubMed:31375563). Acts as a negative regulator of autophagy by mediating 'Lys-29'- and 'Lys-48'- linked ubiquitination of PIK3C3/VPS34, promoting its degradation (PubMed:33637724). Can assemble unanchored poly-ubiquitin chains in either 'Lys-29'- or 'Lys-48'-linked polyubiquitin chains; with some preference for 'Lys-48' linkages (PubMed:11278995, PubMed:16601690, PubMed:25752577). 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:21167755). Catalyzes ubiquitination and degradation of CAND2 (PubMed:12692129).

Tissue Location
Highly expressed in skeletal muscle. Detected at much lower levels in kidney and pancreas.

UBE3C Blocking Peptide (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

UBE3C Blocking Peptide (Center) - Images

UBE3C Blocking Peptide (Center) - 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.

UBE3C Blocking Peptide (Center) - References

Nomura N., et al. DNA Res. 1:27-35(1994).
Hillier L.W., et al. Nature 424:157-164(2003).
Scherer S.W., et al. Science 300:767-772(2003).
Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
You J., et al. J. Biol. Chem. 276:19871-19878(2001).