

**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:<a href="http://www.uniprot.org/citations/11278995" target="\_blank">11278995</a>, PubMed:<a href="http://www.uniprot.org/citations/12692129" target="\_blank">12692129</a>, PubMed:<a href="http://www.uniprot.org/citations/16341092" target="\_blank">16341092</a>, PubMed:<a href="http://www.uniprot.org/citations/16601690" target="\_blank">16601690</a>, PubMed:<a href="http://www.uniprot.org/citations/24811749" target="\_blank">24811749</a>, PubMed:<a href="http://www.uniprot.org/citations/24158444" target="\_blank">24158444</a>, PubMed:<a href="http://www.uniprot.org/citations/25752573" target="\_blank">25752573</a>, PubMed:<a href="http://www.uniprot.org/citations/25752577" target="\_blank">25752577</a>, PubMed:<a href="http://www.uniprot.org/citations/34239127" target="\_blank">34239127</a>, PubMed:<a href="http://www.uniprot.org/citations/33637724" target="\_blank">33637724</a>, PubMed:<a href="http://www.uniprot.org/citations/32039437" target="\_blank">32039437</a>). 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:<a href="http://www.uniprot.org/citations/9575161" target="\_blank">9575161</a>, PubMed:<a href="http://www.uniprot.org/citations/32039437" target="\_blank">32039437</a>). 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</a>, PubMed:<a href="http://www.uniprot.org/citations/28396413" target="\_blank">28396413</a>, PubMed:<a href="http://www.uniprot.org/citations/31375563" target="\_blank">31375563</a>). 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:<a href="http://www.uniprot.org/citations/24811749" target="\_blank">24811749</a>, PubMed:<a href="http://www.uniprot.org/citations/31375563" target="\_blank">31375563</a>). Acts as a negative regulator of autophagy by mediating 'Lys-29'- and 'Lys-48'- linked ubiquitination of PIK3C3/VPS34, promoting its degradation (PubMed:<a href="http://www.uniprot.org/citations/33637724" target="\_blank">33637724</a>). Can assemble unanchored poly-ubiquitin chains in either 'Lys-29'- or 'Lys-48'-linked polyubiquitin chains; with some preference for 'Lys-48' linkages (PubMed:<a href="http://www.uniprot.org/citations/11278995" target="\_blank">11278995</a>, PubMed:<a href="http://www.uniprot.org/citations/16601690" target="\_blank">16601690</a>, PubMed:<a href="http://www.uniprot.org/citations/25752577" target="\_blank">25752577</a>). 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:<a href="http://www.uniprot.org/citations/21167755" target="\_blank">21167755</a>). Catalyzes ubiquitination and degradation of CAND2 (PubMed:<a href="http://www.uniprot.org/citations/12692129" target="\_blank">12692129</a>).

#### 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).