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# OTUB1 Blocking Peptide (C-Term)

**Synthetic peptide**
**Catalog # BP21558b**

## Specification

### OTUB1 Blocking Peptide (C-Term) - Product Information

Primary Accession Q96FW1

### OTUB1 Blocking Peptide (C-Term) - Additional Information

**Gene ID** 55611

**Other Names**
Ubiquitin thioesterase OTUB1, Deubiquitinating enzyme OTUB1, OTU domain-containing ubiquitin aldehyde-binding protein 1, Otubain-1, hOTU1, Ubiquitin-specific-processing protease OTUB1, OTUB1, OTB1, OTU1

**Target/Specificity**
The synthetic peptide sequence is selected from aa 185-199 of HUMAN OTUB1

**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.

### OTUB1 Blocking Peptide (C-Term) - Protein Information

**Name** OTUB1

**Synonyms** OTB1, OTU1

**Function**

### OTUB1 Blocking Peptide (C-Term) - Background

Hydrolase that can specifically remove 'Lys-48'-linked conjugated ubiquitin from proteins and plays an important regulatory role at the level of protein turnover by preventing degradation. Regulator of T-cell anergy, a phenomenon that occurs when T-cells are rendered unresponsive to antigen rechallenge and no longer respond to their cognate antigen. Acts via its interaction with RNF128/GRAIL, a crucial inductor of CD4 T-cell anergy. Isoform 1 destabilizes RNF128, leading to prevent anergy. In contrast, isoform 2 stabilizes RNF128 and promotes anergy. Surprisingly, it regulates RNF128-mediated ubiquitination, but does not deubiquitinate polyubiquitinated RNF128. Deubiquitinates estrogen receptor alpha (ESR1). Mediates deubiquitination of 'Lys- 48'-linked polyubiquitin chains, but not 'Lys-63'-linked polyubiquitin chains. Not able to cleave di-ubiquitin. Also capable of removing NEDD8 from NEDD8 conjugates, but with a much lower preference compared to 'Lys-48'-linked ubiquitin.

### OTUB1 Blocking Peptide (C-Term) - References

Balakirev M.Y.,et al.EMBO Rep. 4:517-522(2003).
Soares L.,et al.Nat. Immunol. 5:45-54(2004).
Zhang Q.-H.,et al.Genome Res. 10:1546-1560(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
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**Cellular Location**
Cytoplasm.

**Tissue Location**
Isoform 1 is ubiquitous. Isoform 2 is expressed only in lymphoid tissues such as tonsils, lymph nodes and spleen, as well as peripheral blood mononuclear cells

## OTUB1 Blocking Peptide (C-Term) - Protocols

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

- Blocking Peptides