

**FBXO45 Blocking Peptide (N-Term)**

Synthetic peptide

Catalog # BP21457a

**Specification**

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**FBXO45 Blocking Peptide (N-Term) - Product Information**

Primary Accession

[POC2W1](#)**FBXO45 Blocking Peptide (N-Term) - Additional Information**

Gene ID 200933

**Other Names**

F-box/SPRY domain-containing protein 1, F-box only protein 45, hFbxo45, FBXO45, FBX45

**Target/Specificity**

The synthetic peptide sequence is selected from aa 83-95 of HUMAN FBXO45

**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.

**FBXO45 Blocking Peptide (N-Term) - Protein Information**

Name FBXO45

Synonyms FBX45

**Function**

Component of E3 ubiquitin ligase complex consisting of FBXO45, MYCBP2 and SKP1 (PubMed:<a href="http://www.uniprot.org/citations/29997255" target="\_blank">29997255</a>). Functions in substrate recognition but plays also an important role in assembly of the complex (PubMed:<a href="http://www.uniprot.org/citations/29997255" target="\_blank">29997255</a>). Required for normal neuromuscular synaptogenesis, axon pathfinding and neuronal migration (By similarity). Regulates neuron migration during brain development through interaction with N- cadherin/CDH2 after secretion via a non-classical mechanism (By similarity). Plays a role in the regulation of neurotransmission at mature neurons (By similarity). May control synaptic activity by controlling UNC13A via ubiquitin dependent pathway (By similarity). Specifically recognizes TP73, promoting its ubiquitination and degradation. Polyubiquitinates NMNAT2, an adenylyltransferase that acts as an axon maintenance factor, and regulates its stability and degradation by the proteasome (PubMed:<a href="http://www.uniprot.org/citations/29997255" target="\_blank">29997255</a>). Acts also by ubiquitinating FBXW7 during prolonged mitotic arrest and promotes FBXW7

proteasomal degradation (PubMed:<a href="http://www.uniprot.org/citations/31285543" target="\_blank">31285543</a>). Induces subsequently an increase in mitotic slippage and prevents mitotic cell death (PubMed:<a href="http://www.uniprot.org/citations/31285543" target="\_blank">31285543</a>). In response to influenza infection, mediates interferon-lambda receptor IFNLR1 polyubiquitination and degradation through the ubiquitin-proteasome system by docking with its intracellular receptor domain (PubMed:<a href="http://www.uniprot.org/citations/36379255" target="\_blank">36379255</a>).

**Cellular Location**

Secreted. Postsynaptic cell membrane {ECO:0000250|UniProtKB:P0CH38}. Presynaptic cell membrane {ECO:0000250|UniProtKB:P0CH38}. Nucleus. Note=Secreted by a non-classical mechanism.

**FBXO45 Blocking Peptide (N-Term) - Protocols**

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

- [Blocking Peptides](#)

**FBXO45 Blocking Peptide (N-Term) - Images****FBXO45 Blocking Peptide (N-Term) - Background**

Component of E3 ubiquitin ligase complexes. Required for normal neuromuscular synaptogenesis, axon pathfinding and neuronal migration (By similarity). Plays a role in the regulation of neurotransmission at mature neurons (By similarity). May controls synaptic activity by controlling UNC13A via ubiquitin dependent pathway (By similarity). Specifically recognizes TP73, promoting its ubiquitination and degradation.

**FBXO45 Blocking Peptide (N-Term) - References**

Muzny D.M.,et al.Nature 440:1194-1198(2006).  
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Jin J.,et al.Genes Dev. 18:2573-2580(2004).  
Gauci S.,et al.Anal. Chem. 81:4493-4501(2009).