

**RNF126 Blocking Peptide (Center)** Synthetic peptide

Catalog # BP21884c

## Specification

## **RNF126 Blocking Peptide (Center) - Product Information**

**Primary Accession** 

<u>Q9BV68</u>

# **RNF126 Blocking Peptide (Center) - Additional Information**

Gene ID 55658

**Other Names** 

E3 ubiquitin-protein ligase RNF126, 632-, RING finger protein 126 {ECO:0000312|HGNC:HGNC:21151}, RNF126 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=21151" target="\_blank">HGNC:21151</a>)

**Target/Specificity** The synthetic peptide sequence is selected from aa 104-115 of HUMAN RNF126 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=21151" target="\_blank">HGNC:21151</a>)

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.

## **RNF126 Blocking Peptide (Center) - Protein Information**

Name RNF126 {ECO:0000303|PubMed:23026136, ECO:0000312|HGNC:HGNC:21151}

Function

E3 ubiquitin-protein ligase that mediates ubiquitination oF target proteins (PubMed:<a href="http://www.uniprot.org/citations/23277564" target="\_blank">23277564</a>, PubMed:<a href="http://www.uniprot.org/citations/24275455" target="\_blank">24275455</a>, PubMed:<a href="http://www.uniprot.org/citations/24981174" target="\_blank">24981174</a>, PubMed:<a href="http://www.uniprot.org/citations/36563124" target="\_blank">36563124</a>). Depending on the associated E2 ligase, mediates 'Lys- 27'-, 'Lys-29'-, 'Lys-48'- and/or 'Lys-63'-linked polyubiquitination of substrates (PubMed:<a href="http://www.uniprot.org/citations/36563124" target="\_blank">36563124</a>). Depending on the associated E2 ligase, mediates 'Lys- 27'-, 'Lys-29'-, 'Lys-48'- and/or 'Lys-63'-linked polyubiquitination of substrates (PubMed:<a href="http://www.uniprot.org/citations/36563124" target="\_blank">36563124</a>). Part of a BAG6-dependent quality control process ensuring that proteins of the secretory pathway that are mislocalized to the cytosol are degraded by the proteasome. Probably acts by providing the ubiquitin ligase activity associated with the BAG6



complex and be responsible for ubiquitination of the hydrophobic mislocalized proteins and their targeting to the proteasome (PubMed:<a href="http://www.uniprot.org/citations/24981174" target="\_blank">24981174</a>, PubMed:<a href="http://www.uniprot.org/citations/29042515" target="\_blank">24981174</a>, PubMed:<a href="http://www.uniprot.org/citations/29042515" target="\_blank">29042515</a>). May also play a role in the endosomal recycling of IGF2R, the cation-independent mannose-6- phosphate receptor (PubMed:<a

href="http://www.uniprot.org/citations/24275455" target="\_blank">24275455</a>). May play a role in the endosomal sorting and degradation of several membrane receptors including EGFR, FLT3, MET and CXCR4, by mediating their ubiquitination (PubMed:<a href="http://www.uniprot.org/citations/23418353" target="\_blank">23418353</a>). By

ubiquitinating CDKN1A/p21 and targeting it for degradation, may also promote cell proliferation (PubMed:<a href="http://www.uniprot.org/citations/23026136" target="\_blank">23026136</a>). May monoubiquitinate AICDA (PubMed:<a href="http://www.uniprot.org/citations/23277564" target="\_blank">23277564</a>). Acts as a regulator of DNA repair by mediating 'Lys-27'- and 'Lys-29'-linked polyubiquitination of MRE11, thereby promoting the exonuclease activity of MRE11 (PubMed:<a href="http://www.uniprot.org/citations/36563124" target="\_blank">36563124</a>).

Cellular Location Cytoplasm. Nucleus

**Tissue Location** Highly expressed in liver and testis.

# **RNF126 Blocking Peptide (Center) - Protocols**

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

### • **Blocking Peptides**

### **RNF126 Blocking Peptide (Center) - Images**

## RNF126 Blocking Peptide (Center) - Background

E3 ubiquitin-protein ligase that regulates several biological processes through ubiquitination of various target proteins. Depending on the associated E2 ligase, mediates 'Lys- 48'- and 'Lys-63'-linked polyubiquitination of substrates. Through their polyubiquitination, may play a role in the endosomal sorting and degradation of several membrane receptors including EGFR, FLT3, MET and CXCR4. May also be part of a BAG6-dependent quality control process ensuring that proteins of the secretory pathway that are mislocalized to the cytosol are degraded by the proteasome. May provide the ubiquitin ligase activity associated with the BAG6 complex and be responsible for ubiquitination of the mislocalized proteins and their targeting to the proteasome (PubMed:24981174). May also play a role in the endosomal recycling of IGF2R, the cation-independent mannose-6-phosphate receptor (PubMed:24275455). By ubiquitinating CDKN1A/p21 and targeting it for degradation, may also promote cell proliferation (PubMed:23026136). May monoubiquitinate AICDA (PubMed:23277564).

### **RNF126 Blocking Peptide (Center) - References**

Ota T.,et al.Nat. Genet. 36:40-45(2004). Daub H.,et al.Mol. Cell 31:438-448(2008). Olsen J.V.,et al.Sci. Signal. 3:RA3-RA3(2010). Zhi X.,et al.Cancer Res. 73:385-394(2013). Smith C.J.,et al.J. Cell Sci. 126:1366-1380(2013).