

# **UIMC1 Blocking Peptide (C-term)**

Synthetic peptide Catalog # BP20602c

## **Specification**

# **UIMC1 Blocking Peptide (C-term) - Product Information**

**Primary Accession** 

**Q96RL1** 

# **UIMC1 Blocking Peptide (C-term) - Additional Information**

**Gene ID 51720** 

#### **Other Names**

BRCA1-A complex subunit RAP80, Receptor-associated protein 80, Retinoid X receptor-interacting protein 110, Ubiquitin interaction motif-containing protein 1, UIMC1, RAP80, RXRIP110

### Target/Specificity

The synthetic peptide sequence is selected from aa 587-601 of HUMAN UIMC1

#### **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.

### **UIMC1** Blocking Peptide (C-term) - Protein Information

Name UIMC1

Synonyms RAP80, RXRIP110

### **Function**

Ubiquitin-binding protein (PubMed:<a href="http://www.uniprot.org/citations/24627472" target="\_blank">24627472</a>). Specifically recognizes and binds 'Lys-63'-linked ubiquitin (PubMed:<a href="http://www.uniprot.org/citations/19328070" target="\_blank">19328070</a>, Ref.38). Plays a central role in the BRCA1-A complex by specifically binding 'Lys-63'-linked ubiquitinated histones H2A and H2AX at DNA lesions sites, leading to target the BRCA1-BARD1 heterodimer to sites of DNA damage at double-strand breaks (DSBs). The BRCA1-A complex also possesses deubiquitinase activity that specifically removes 'Lys-63'- linked ubiquitin on histones H2A and H2AX. Also weakly binds monoubiquitin but with much less affinity than 'Lys-63'-linked ubiquitin. May interact with monoubiquitinated histones H2A and H2B; the relevance of such results is however unclear in vivo. Does not bind Lys-48'-linked ubiquitin. May indirectly act as a transcriptional repressor by inhibiting the interaction of NR6A1 with the corepressor NCOR1.



### **Cellular Location**

Nucleus. Note=Localizes at sites of DNA damage at double-strand breaks (DSBs)

### **Tissue Location**

Expressed in testis, ovary, thymus and heart. Expressed in germ cells of the testis.

## **UIMC1 Blocking Peptide (C-term) - Protocols**

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

#### Blocking Peptides

**UIMC1 Blocking Peptide (C-term) - Images** 

# **UIMC1** Blocking Peptide (C-term) - Background

Ubiquitin-binding protein that specifically recognizes and binds 'Lys-63'-linked ubiquitin. Plays a central role in the BRCA1-A complex by specifically binding 'Lys-63'-linked ubiquitinated histones H2A and H2AX at DNA lesions sites, leading to target the BRCA1-BARD1 heterodimer to sites of DNA damage at double-strand breaks (DSBs). The BRCA1-A complex also possesses deubiquitinase activity that specifically removes 'Lys-63'-linked ubiquitin on histones H2A and H2AX. Also weakly binds monoubiquitin but with much less affinity than 'Lys-63'-linked ubiquitin. May interact with monoubiquitinated histones H2A and H2B; the relevance of such results is however unclear in vivo. Does not bind Lys-48'-linked ubiquitin. May indirectly act as a transcriptional repressor by inhibiting the interaction of NR6A1 with the corepressor NCOR1.

#### **UIMC1 Blocking Peptide (C-term) - References**

Yan Z.,et al.J. Biol. Chem. 277:32379-32388(2002). Peng Y.,et al.Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases. Xu X.,et al.Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases. Ota T.,et al.Nat. Genet. 36:40-45(2004). Bechtel S.,et al.BMC Genomics 8:399-399(2007).