

# **UVRAG Antibody (C-term) Blocking Peptide**

Synthetic peptide Catalog # BP1850b

### **Specification**

## **UVRAG Antibody (C-term) Blocking Peptide - Product Information**

Primary Accession

**09P2Y5** 

## UVRAG Antibody (C-term) Blocking Peptide - Additional Information

**Gene ID 7405** 

#### **Other Names**

UV radiation resistance-associated gene protein, p63, UVRAG

### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP1850b>AP1850b</a> was selected from the C-term region of human Autophagy UVRAG. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

#### **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.

## UVRAG Antibody (C-term) Blocking Peptide - Protein Information

## Name UVRAG

### **Function**

Versatile protein that is involved in regulation of different cellular pathways implicated in membrane trafficking. Involved in regulation of the COPI-dependent retrograde transport from Golgi and the endoplasmic reticulum by associating with the NRZ complex; the function is dependent on its binding to phosphatidylinositol 3- phosphate (PtdIns(3)P) (PubMed:<a href="http://www.uniprot.org/citations/16799551" target="\_blank">16799551</a>, PubMed:<a href="http://www.uniprot.org/citations/18552835" target="\_blank">18552835</a>, PubMed:<a href="http://www.uniprot.org/citations/20643123" target="\_blank">20643123</a>, PubMed:<a href="http://www.uniprot.org/citations/24056303" target="\_blank">24056303</a>, PubMed:<a href="http://www.uniprot.org/citations/28306502" target="\_blank">28306502</a>). During autophagy acts as a regulatory subunit of the alternative PI3K complex II (PI3KC3-C2) that mediates formation of phosphatidylinositol 3-phosphate and is believed to be involved in maturation of autophagosomes and endocytosis. Activates lipid kinase activity of PIK3C3



(PubMed:<a href="http://www.uniprot.org/citations/16799551" target=" blank">16799551</a>, PubMed: <a href="http://www.uniprot.org/citations/20643123" target="blank">20643123</a>, PubMed:<a href="http://www.uniprot.org/citations/24056303" target="\_blank">24056303</a>, PubMed:<a href="http://www.uniprot.org/citations/28306502" target="\_blank">28306502</a>). Involved in the regulation of degradative endocytic trafficking and cytokinesis, and in regulation of ATG9A transport from the Golgi to the autophagosome; the functions seems to implicate its association with PI3KC3-C2 (PubMed: <a href="http://www.uniprot.org/citations/16799551" target=" blank">16799551</a>, PubMed:<a href="http://www.uniprot.org/citations/20643123" target="blank">20643123</a>, PubMed:<a href="http://www.uniprot.org/citations/24056303" target="blank">24056303</a>). Involved in maturation of autophagosomes and degradative endocytic trafficking independently of BECN1 but depending on its association with a class C Vps complex (possibly the HOPS complex); the association is also proposed to promote autophagosome recruitment and activation of Rab7 and endosome-endosome fusion events (PubMed:<a href="http://www.uniprot.org/citations/18552835" target=" blank">18552835</a>,  $PubMed: <a href="http://www.uniprot.org/citations/28306502" target="\_blank">28306502 </a>).$ Enhances class C Vps complex (possibly HOPS complex) association with a SNARE complex and promotes fusogenic SNARE complex formation during late endocytic membrane fusion (PubMed:<a href="http://www.uniprot.org/citations/24550300" target=" blank">24550300</a>). In case of negative- strand RNA virus infection is required for efficient virus entry, promotes endocytic transport of virions and is implicated in a VAMP8- specific fusogenic SNARE complex assembly (PubMed:<a href="http://www.uniprot.org/citations/24550300" target=" blank">24550300</a>).

#### **Cellular Location**

Late endosome. Lysosome. Cytoplasmic vesicle, autophagosome. Early endosome. Endoplasmic reticulum. Midbody. Chromosome, centromere. Note=Colocalizes with RAB9-positive compartments involved in retrograde transport from late endosomes to trans-Golgi network. Colocalization with early endosomes is only partial (PubMed:24056303). Recruited to autophagosome following interaction with RUBCNL/PACER (PubMed:28306502)

## **Tissue Location**

Highly expressed in brain, lung, kidney and liver.

## **UVRAG Antibody (C-term) Blocking Peptide - Protocols**

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

### Blocking Peptides

UVRAG Antibody (C-term) Blocking Peptide - Images

## UVRAG Antibody (C-term) Blocking Peptide - Background

UVRAG complements the ultraviolet sensitivity of xeroderma pigmentosum group C cells and encodes a protein with a C2 domain. The protein activates the Beclin1-PI(3)KC3 complex, promoting autophagy and suppressing the proliferation and tumorigenicity of human colon cancer cells. Chromosomal aberrations involving this gene are associated with left-right axis malformation and mutations in this gene have been associated with colon cancer.

## **UVRAG Antibody (C-term) Blocking Peptide - References**

Liang, C., et al. Nat. Cell Biol. 8 (7), 688-699 (2006)lonov, Y., et al. Oncogene 23 (3), 639-645 (2004)Goi, T., et al. Surg. Today 33 (9), 702-706 (2003)lida, A., et al. Hum. Genet. 106 (3), 277-287 (2000)Perelman, B., et al. Genomics 41 (3), 397-405 (1997)Bekri, S., et al. Cytogenet. Cell Genet. 79 (1-2), 125-131 (1997)Teitz, T., et al. Gene 87 (2), 295-298 (1990)