

**UVRAG Antibody (C-term L555) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP1850e****Specification**

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**UVRAG Antibody (C-term L555) Blocking Peptide - Product Information**Primary Accession [Q9P2Y5](#)**UVRAG Antibody (C-term L555) 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 [AP1850e](/product/products/AP1850e) 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 L555) 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: [16799551](http://www.uniprot.org/citations/16799551), PubMed: [18552835](http://www.uniprot.org/citations/18552835), PubMed: [20643123](http://www.uniprot.org/citations/20643123), PubMed: [24056303](http://www.uniprot.org/citations/24056303), PubMed: [28306502](http://www.uniprot.org/citations/28306502)). 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 L555) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

### UVRAG Antibody (C-term L555) Blocking Peptide - Images

### UVRAG Antibody (C-term L555) 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 the UVRAG gene are associated with left-right axis malformation and mutations in the gene have been associated with colon cancer.

### UVRAG Antibody (C-term L555) Blocking Peptide - References

Liang,C., et al. Nat. Cell Biol. 8 (7), 688-699 (2006)Ionov,Y., et al. Oncogene 23 (3), 639-645 (2004)Goi,T., et al. Surg. Today 33 (9), 702-706 (2003)Iida,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)