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UVRAG Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP1850f

Specification

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

Primary Accession Q9P2Y5

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 AP1850f was selected from the C-term region of human 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

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)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)

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, PubMed:18552835, PubMed:20643123, PubMed:24056303, PubMed:28306502). During autophagy acts as 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:16799551, PubMed:20643123, PubMed:24056303, PubMed:28306502). 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:16799551, PubMed:20643123, PubMed:24056303). 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:18552835, PubMed:28306502). 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:24550300). 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:24550300).

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