

**UVRAG Antibody (L133)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1850d**

**Specification**

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**UVRAG Antibody (L133) - Product Information**

Application	IF, WB, IHC-P,E
Primary Accession	<a href="#">O9P2Y5</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	78151
Antigen Region	120-152

**UVRAG Antibody (L133) - Additional Information**

**Gene ID** 7405

**Other Names**

UV radiation resistance-associated gene protein, p63, UVRAG

**Target/Specificity**

This UVRAG antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 120-152 amino acids from human UVRAG.

**Dilution**

IF~~Tested  
WB~~1:1000  
IHC-P~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

UVRAG Antibody (L133) is for research use only and not for use in diagnostic or therapeutic procedures.

**UVRAG Antibody (L133) - 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](#), PubMed:[18552835](#), PubMed:[20643123](#), PubMed:[24056303](#), PubMed:[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:[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.

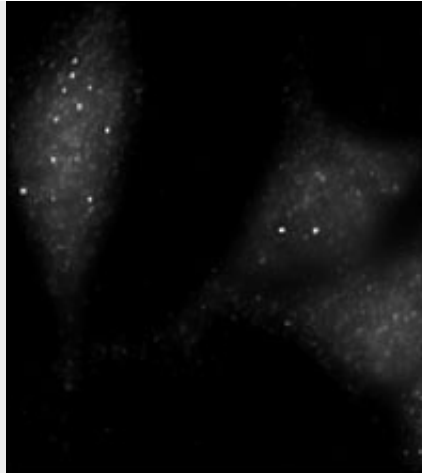
### UVRAG Antibody (L133) - Protocols

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

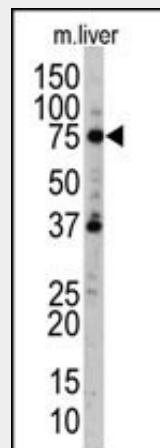
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### UVRAG Antibody (L133) - Images

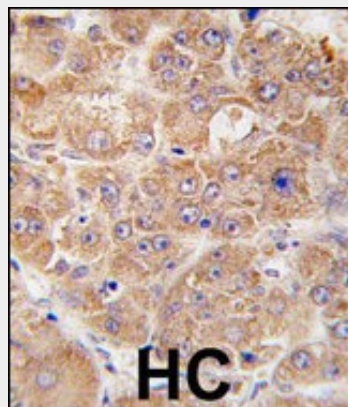




Immunofluorescence staining of Autophagy UVRAG antibody (Cat# AP1850d) on Methanol-fixed HeLa cells. Data courtesy of Dr. Eeva-Liisa Eskelinen, University of Helsinki, Finland.



Western blot analysis of anti-hUVRAG (Center) Pab (RB10846) in mouse liver tissue lysate. hUVRAG (Center)(arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with hUVRAG (N-term L133), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

### **UVRAG Antibody (L133) - 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 (L133) - 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)