10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

UVRAG Antibody (L133)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1850d

Specification

UVRAG Antibody (L133) - Product Information

Application	**IHC-P, WB, IF,E**
Primary Accession	Q9P2Y5
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
IHC-P~~1:10~50
WB~~1:1000
IF~~Tested
E~~Use at an assay dependent concentration.

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)

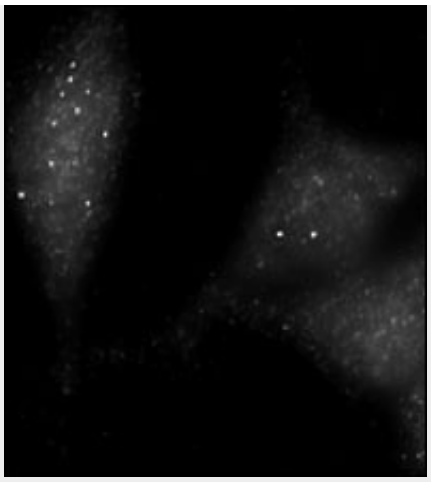
Tissue Location
Highly expressed in brain, lung, kidney and liver.

UVRAG Antibody (L133) - Protocols

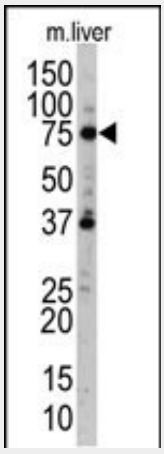
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

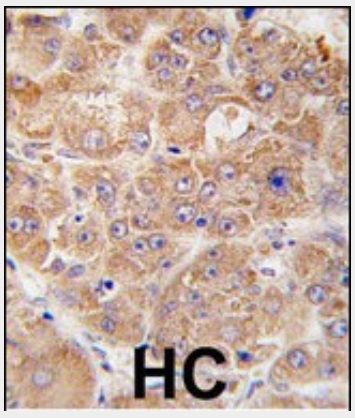
UVRAG Antibody (L133) - Images



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)