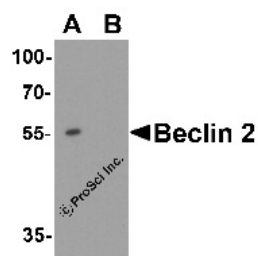


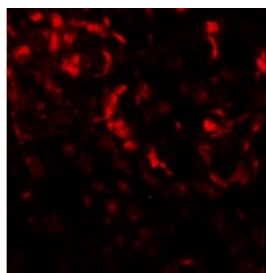


Beclin 2 Antibody

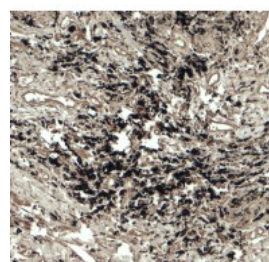
CATALOG NUMBER: 7989



Western blot analysis of Beclin 2 in Jurkat cell lysate with Beclin 2 antibody at 1 ug/ml in (A) the absence and (B) the presence of blocking peptide.



Immunofluorescence of Beclin 2 in human lung carcinoma tissue with Beclin 2 antibody at 20 ug/ml.



Immunohistochemistry of Beclin 2 in human lung carcinoma tissue with Beclin 2 antibody at 5 ug/ml.

Specifications

SPECIES REACTIVITY:	Human
TESTED APPLICATIONS:	ELISA, IF, IHC-P, WB
APPLICATIONS:	Beclin 2 antibody can be used for detection of Beclin 2 by Western blot at 1 - 2 ug/ml. Antibody can also be used for immunohistochemistry starting at 5 ug/mL. For immunofluorescence start at 20 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
POSITIVE CONTROL:	1) Cat. No. 1205 - Jurkat Cell Lysate
PREDICTED MOLECULAR WEIGHT:	Predicted: 47 kDa Observed: 55 kDa
SPECIFICITY:	Beclin 2 antibody is human specific. At least two isoforms of Beclin 2 are known to exist; this antibody will only detect the longer isoform. Beclin 2 antibody is predicted to not cross-react with Beclin 1.
IMMUNOGEN:	Beclin 2 antibody was raised against a 16 amino acid peptide near the amino terminus of human Beclin 2. The immunogen is located within amino acids 30 - 80 of Beclin 2.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	Beclin 2 antibody is affinity chromatography purified via peptide column.
PHYSICAL STATE:	Liquid
BUFFER:	Beclin 2 antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	Beclin 2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
CLONALITY:	Polyclonal
ISOTYPE:	IgG
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	BECN2, BECN1L1, Beclin-1-like protein 1, Beclin 1 autophagy related pseudogene 1, BECN1P1
ACCESSION NO.:	NP_001277622
PROTEIN GI NO.:	595582373
OFFICIAL SYMBOL:	BECN1P1
GENE ID:	441925

Background

BACKGROUND: Autophagy, the process of bulk degradation of cellular proteins through an autophagosomic-lysosomal pathway is important for normal growth control and may be defective in tumor cells (1,2). Beclin 2 is a mammalian specific homolog of the autophagy protein Beclin 1 (3). Like Beclin 1, Beclin 2 interacts with Bcl-2 and class III PI3K complex components. However, Beclin 2 functions in an additional lysosomal degradation pathway and is required for ligand-induced endolysosomal degradation of several G protein-coupled receptors (3). Beclin 2 is also required for agonist-induced lysosome-mediated degradation of EGFR in lung cancer cells, suggesting that it may also play a role in regulating other intracellular signaling pathways (4).

- REFERENCES:**
- 1) Gozuacik D and Kimchi A. Autophagy as a cell death and tumor suppressor mechanism. *Oncogene*. 2004; 23:2891-906.
 - 2) Kisen GO, Tessitore L, Costelli P, et al. Reduced autophagic activity in primary rat hepatocellular carcinoma and ascites hepatoma cells. *Carcinogenesis* 1993; 14:2501-5.
 - 3) He C, Wei Y, Sun K, et al. Beclin 2 functions in autophagy, degradation of G protein-coupled receptors, and metabolism. *Cell* 2013; 154:1085-99.
 - 4) Zhang W and He C. Regulation of plasma membrane receptors by a new autophagy-related BECN/Beclin family member. *Autophagy* 2014; 10: epub.

FOR RESEARCH USE ONLY

December 14, 2016