

# Beclin-1 (NT) antibody (pAb)

## Rabbit Anti-Human/Mouse/Rat Beclin-1 (Autophagy Related Protein)

### Instruction Manual

Catalog Number	PK-AB718-3613
Synonyms	Beclin-1 Antibody: Beclin-1, Coiled-coil myosin-like Bcl-2-interacting protein
Description	Autophagy, the process of bulk degradation of cellular proteins through an autophagosomal-lysosomal pathway is important for normal growth control and may be defective in tumor cells. Beclin-1, a coiled-coil Bcl-2-interacting protein homologous to the yeast autophagy gene <i>apg6</i> , is a mammalian autophagy gene that can inhibit tumorigenesis and is expressed at reduced levels in human breast carcinoma, suggesting that defects in autophagy proteins may contribute to the development or progression of tumors. Bcl-2 can bind to Beclin-1 and inhibit Beclin-1-dependent autophagy in yeast and mammalian cells, suggesting that Bcl-2 functions as an anti-autophagy protein as well as an anti-apoptotic protein, which helps maintain autophagy at levels that are more compatible with cell survival rather than cell death.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	Rabbit polyclonal Beclin-1 antibody was raised against a 17 amino acid peptide from near the amino terminus of human Beclin-1 (Genbank accession No. AAH10276).
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, IHC I Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. Application have to be determined individually. Beclin-1 antibody can be used for the detection of Beclin-1 by Western blot at 0.5 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2 µg/mL.
Images	Available upon request.
References	Gozuacik D and Kimchi A. Autophagy as a cell death and tumor suppressor mechanism. <i>Oncogene</i> . 2004; 23:2891-906. Kisen GO, Tessitore L, Costelli P, et al. Reduced autophagic activity in primary rat hepatocellular carcinoma and ascites hepatoma cells. <i>Carcinogenesis</i> 1993; 14:2501-5. Liang XH, Kleeman LK, Jiang HH, et al. Protection against fatal Sindbis virus encephalitis by Beclin, a novel Bcl-2-interacting protein. <i>J. Virol.</i> 1998; 72:8586-96. Kametaka S, Okano T, Ohsumi M, et al. Apg14p and Apg6/Vps30p form a protein complex essential for autophagy in the yeast <i>Saccharomyces cerevisiae</i> . <i>J. Biol. Chem.</i> 1998; 273:22284-91.
Images	Available upon request.
Related Products	Blocking Peptide, Cat. No. PK-AB718-3613P 293 Cell Lysate, Cat. No. PK-AB718-1210 Beclin-1 Antibody (CT), Cat. No. PK-AB718-3611; Bcl-2 Antibody (NT), Cat. No. PK-AB718-3335; APG7 Antibody (CT), Cat. No. PK-AB718-3615

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