

Beclin 1 Polyclonal Antibody

ORDERING INFORMATION

Catalog No. 23009 **Size** 100ug

Format: Peptide affinity-purified antibody in PBS, pH 7.4, 50% glycerol, 0.09% sodium azide.

Concentration: 1mg/ml

BACKGROUND

Autophagy is a catabolic process that results in the degradation of bulk cytoplasmic contents within autophagosomes and lysosomes. Beclin 1, the mammalian orthologue of yeast Atg6, has a central role in autophagy. It interacts with several cofactors (Atg14L, UVRAG, Bif-1, Rubicon, Ambra1, HMGB1, nPIST, VMP1, SLAM, IP₃R, PINK and survivin) to regulate the lipid kinase Vps-34 protein and promote formation of Beclin 1-Vps34-Vps15 core complexes, thereby inducing autophagy. In contrast, the BH3 domain of Beclin 1 is bound to, and inhibited by Bcl-2 or Bcl-XL. This interaction can be disrupted by phosphorylation of Bcl-2 and Beclin 1, or ubiquitination of Beclin 1. Beclin 1 dysfunction has been implicated in many disorders including cancer and neurodegeneration.

SPECIFICATION SUMMARY

Antigen: Synthetic peptide corresponding to mid-protein amino acids of human Beclin 1.

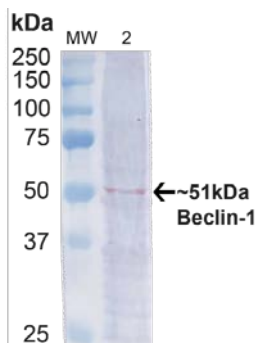
Accession no. NP_001300927.1 **Gene ID** 8678 **SwissProt** Q14457

Host Species: Rabbit

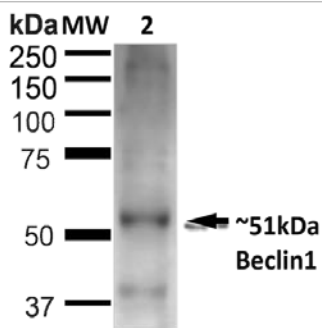
Specificity: This antibody recognizes human and rat Beclin 1.

APPLICATIONS

Immunoblotting: use at 1-2ug/ml. A band of ~51kDa is detected.

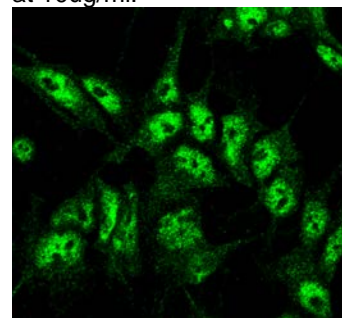


Detection of Beclin 1 20ug HeLa cell lysate.



Detection of Beclin 1 in 20ug rat liver lysate.

Immunofluorescence: use at 10ug/ml.



Detection of Beclin 1 in formaldehyde-fixed neuroblastoma SK-N-BE cells.

These are recommended concentrations. Endusers should determine optimal concentrations for their applications.

DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Store product in appropriate aliquots to avoid multiple freeze-thaw cycles.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.