

Beclin 1 Recombinant monoclonal antibody

Catalog Number: 87536-1-RR

Basic Information

Catalog Number:

87536-1-RR

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1843

GenBank Accession Number:

BC010276

GeneID (NCBI):

8678

UNIPROT ID:

Q14457

Full Name:

beclin 1, autophagy related

Calculated MW:

52 kDa

Observed MW:

60 kDa

Purification Method:

Protein A purification

CloneNo.:

252793B7

Recommended Dilutions:

WB: 1:5000-1:50000

Applications

Tested Applications:

WB, ELISA

Species Specificity:

human, mouse, rat

Positive Controls:

WB : A431 cells, HeLa cells, Raji cells, HEK-293 cells, NIH/3T3 cells, mouse brain tissue, rat brain tissue

Background Information

Beclin 1, also known as ATG6 or VPS30, interacts with various cofactors (e.g. Ambra1, Barkor (Atg14), Rubicon, or UVRAG) to regulate the lipid kinase Vps34 and promote the formation of the BECLIN1-Vps34-Vps15 complex, hence inducing autophagy. Its function (via the BH3 domain) is inhibited by Bcl-2 or Bcl-XL. Beclin 1 (BECN1) is a crucial molecule in the control of the autophagic activity, and its activity is regulated by multiple mechanisms, including the post-translational modification, protein-protein interaction, and subcellular localization. It plays a role in crosstalk between apoptosis and autophagy. It has been reported that Beclin 1 can be cleaved into fragments of 50, 37 and 35 kDa during apoptosis. It is involved in many disorders, including neurodegeneration and cancer (tumorigenesis). Beclin 1 is a mammalian tumor suppressor, and its gene is monoallelically deleted in 75% of ovarian, 50% of breast, and 40% of prostate cancers. Decreased expression of Beclin 1 has also been observed in human brain and lung tumors. The level of Beclin 1 was decreased in the affected brain regions of patients with Alzheimer's disease early in the disease process. Recent studies have also shown that gain and loss of Beclin 1 function affects the death of heart cells.

Storage

Storage:

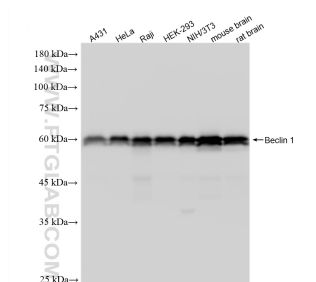
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 87536-1-RR (Beclin 1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.