

For Research Use Only

Beclin 1 Monoclonal antibody, PBS Only

Catalog Number: 66665-1-PBS

1 Publications



Basic Information

Catalog Number:

66665-1-PBS

Size:

1mg/ml

Source:

Mouse

Isotype:

IgG1

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:

52-60 kDa

Purification Method:

Protein A purification

CloneNo.:

1C10C4

Applications

Tested Applications:

WB, IF, IHC, Indirect ELISA

Cited Applications:

WB

Species Specificity:

Human, Mouse, Rat

Cited Species:

rat

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.

Notable Publications

Author	Pubmed ID	Journal	Application
Wen Ou	38961632	Br J Pharmacol	WB

Storage

Storage:

Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS Only

For technical support and original validation data for this product please contact:

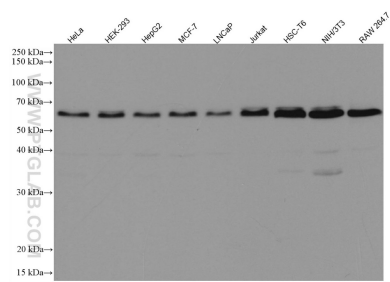
T: 4006900926

E: Proteintech-CN@ptglab.com

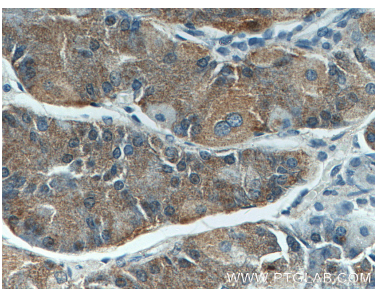
W: ptgcn.com

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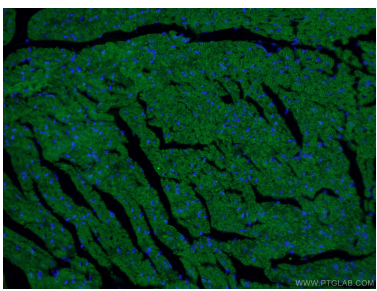
Selected Validation Data



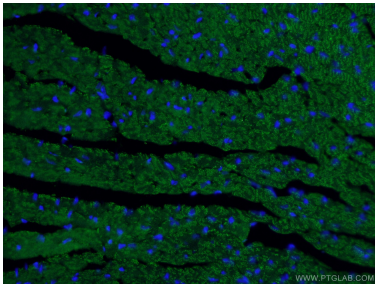
Various lysates were subjected to SDS PAGE followed by western blot with 66665-1-Ig (Beclin 1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66665-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human stomach tissue slide using 66665-1-Ig (Beclin 1 antibody) at dilution of 1:500 (under 10x lens). This data was developed using the same antibody clone with 66665-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 66665-1-Ig (Beclin 1 antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66665-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 66665-1-Ig (Beclin 1 antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66665-1-PBS in a different storage buffer formulation.