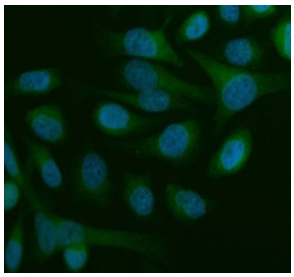
Beclin 1 Antibody (R31504)

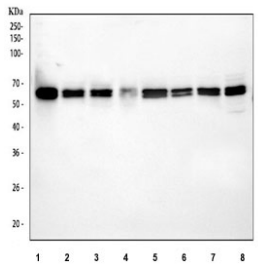
Catalog No.	Formulation	Size
R31504	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

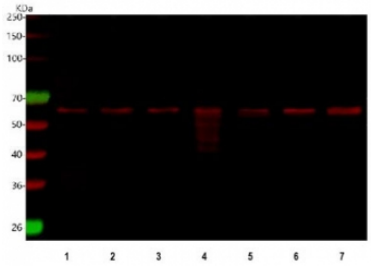
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
Gene ID	8678
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells Immunofluorescence: 5ug/ml Immunoprecipitation: 2ug antibody/500ug lysate
Limitations	This Beclin 1 antibody is available for research use only.



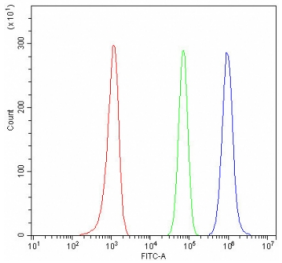
Immunofluorescent staining of FFPE human HeLa cells with Beclin 1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



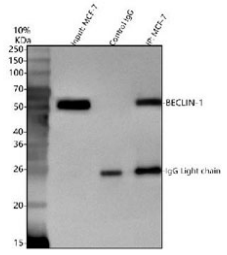
Western blot testing of 1) human Raji, 2) human 293T, 3) human MCF7, 4) human PC-3, 5) rat C6, 6) rat PC-12, 7) mouse NIH 3T3 and 8) mouse RAW264.7 cell lysate with Beclin 1 antibody. Predicted molecular weight ~52 kDa.



Western blot testing of 1) human 293T, 2) human MCF7, 3) human PC-3, 4) rat C6, 5) rat PC-12, 6) mouse NIH 3T3 and 7) mouse RAW264.7 cell lysate with Beclin 1 antibody and DyLight 647 secondary. Predicted molecular weight ~52 kDa.



Flow cytometry testing of fixed and permeabilized human Raji cells with Beclin 1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Beclin 1 antibody.



Immunoprecipitation of Beclin 1 protein from 500ug of human MCF7 whole cell lysate with 2ug of Beclin 1 antibody.

Description

Beclin 1, also known as also known as ATG6 or VPS30 is a protein that in humans is encoded by the BECN1 gene. Beclin 1 and its binding partner class III phosphoinositide 3-kinase (PI3K), also named Vps34, are required for the initiation of the formation of the autophagosome in autophagy. This gene participates in the regulation of autophagy and has an important role in development, tumorigenesis, and neurodegeneration. Schizophrenia is associated with low levels of the protein in the hippocampus of the affected which causes diminished autophagy which in turn results in increased neuronal cell death. It has been found that Beclin 1 can promote autophagy in autophagy-defective yeast with a targeted disruption of apg6/vps30, and in human MCF7 breast carcinoma cells.

Application Notes

Titration of the Beclin 1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human partial recombinant protein (AA 1-354) was used as the immunogen for this Beclin 1 antibody.

Storage

After reconstitution, the Beclin 1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Copyright © NSJ Bioreagents. All rights reserved.