

# Human Beclin 1/BECN1 antibody

Catalog Number: ATGA0355

## PRODUCT INFORMATION

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**Catalog number**

ATGA0355

**Clone No.**

AT45E8

**Product type**

Monoclonal Antibody

**UnitProt No.**

Q14457

**NCBI Accession No.**

NP\_003757

**Alternative Names**

Beclin 1, Coiled-coil myosin-like BCL2-interacting protein, Protein GT197, Beclin 1 autophagy related, ATG6, ATG6 autophagy related 6 homolog, VPS30

## PRODUCT SPECIFICATION

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**Antibody Host**

Mouse

**Reacts With**

Human

**Concentration**

1mg/ml (determined by BCA assay)

**Formulation**

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

**Immunogen**

Recombinant human BECN (1-450aa) purified from E. coli

**Isotype**

IgG2b kappa

**Purification Note**

By protein-A affinity chromatography

**Application**

ELISA, WB, ICC/IF, FACS

**Usage**

The antibody has been tested by ELISA, Western blot, ICC/IF and FACS analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

# Human Beclin 1/BECN1 antibody

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## Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

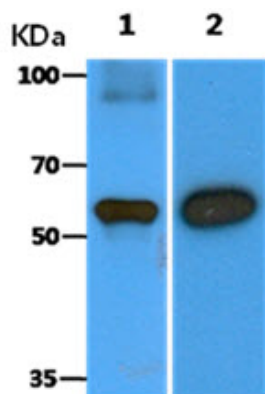
Beclin-1 is a protein that in humans is encoded by the BECN1 gene. Beclin-1 is a mammalian ortholog of the yeast autophagy-related gene (Atg) 6 and BEC-1 in the *C. elegans* nematode. Beclin-1 participates in the regulation of autophagy and has an important role in development, tumorigenesis, and neurodegeneration. 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.

### General References

Liang XH., et al. (1998) *J Virol.* 72(11): 8586-8596.  
Takacs-Vellai K., et al. (2005) *Curr Biol.* 15(16): 1513-1517.

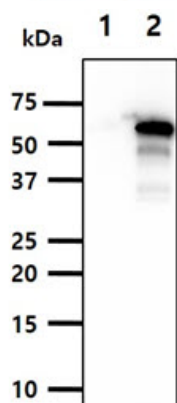
## DATA

### Western blot analysis (WB)



The recombinant protein (10ng) and cell lysate(40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human BECN1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: Recombinant human BECN1 protein  
Lane 2.: Balb/3T3 cell lysate



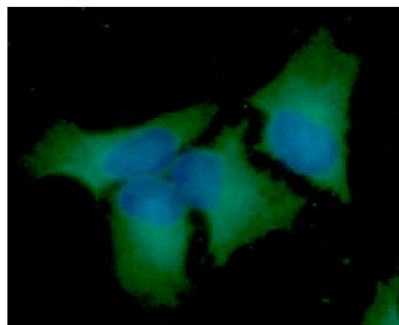
The Cell lysates (10ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human BECN1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: 293T cell lysate  
Lane 2.: BECN1 Transfected 293T cell lysate

### Immunocytochemistry/Immunofluorescence (ICC/IF)

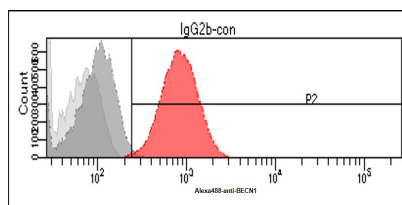
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ICC/IF analysis of BECN1 in HeLa cells. The cell was stained with ATGA0355 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

### Flow cytometry (FACS)



Flow cytometry analysis of BECN1 in HeLa cells. The cell was stained with ATGA0355 at 2-5ug for  $1 \times 10^6$  cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (dark gray), cells without incubation with primary and secondary antibody was used as the negative control (light gray).