

# IHCeasy<sup>®</sup> BECN1 Ready-To-Use IHC Kit

Catalog Number: **KHC1731**

## General Information

Sample type:  
FFPE tissue  
Cited sample type:  
Reactivity:  
Human, Mouse, Rat  
Cited Reactivity:

Assay type:  
Immunohistochemistry  
Primary antibody type:  
Rabbit Polyclonal  
Secondary antibody type:  
Polymer-HRP-Goat anti-Rabbit

## Kit Component

Component	Size	Concentration
Antigen Retrieval Buffer	100 mL	50×
Washing Buffer	100 mL ×2	20×
Blocking Buffer	5 mL	RTU
Primary Antibody	5 mL	RTU
Secondary Antibody	5 mL	RTU
Chromogen Component A	0.2 mL	RTU
Chromogen Component B	4 mL	RTU
Signal Enhancer	5 mL	RTU
Counter Staining Reagent	5 mL	RTU
Mounting Media	5 mL	RTU
Control Slide	1 slide (Optional)	FFPE
Datasheet	1 Copy	
Manual	1 Copy	

## Storage Instructions

All the reagents are stored at 2-8°C. The kit is stable for 6 months from the date of receipt.

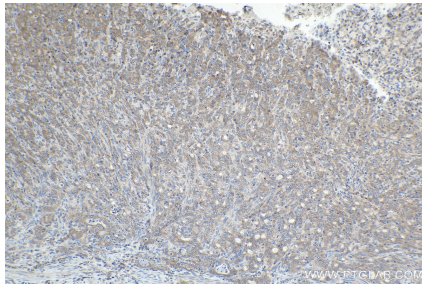
## Background

Beclin 1 (BECN1), 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 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.

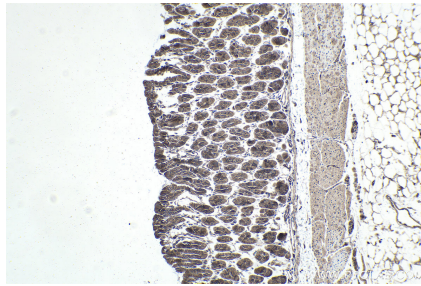
## Synonyms

ATG6, Beclin 1, beclin 1, autophagy related, beclin1, BECN1, GT197, Protein GT197, VPS30

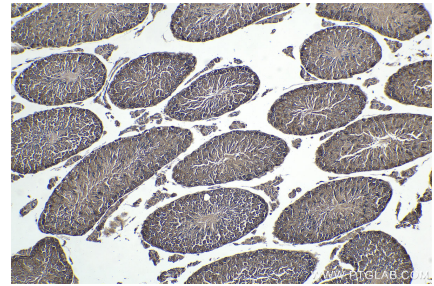
## Selected Validation Data



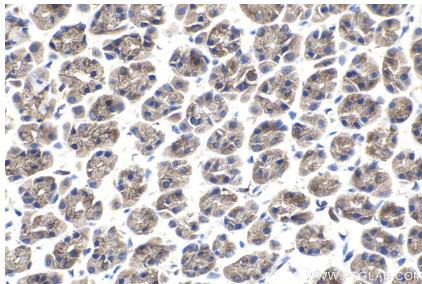
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using KHC1731 (BECN1 IHC Kit).



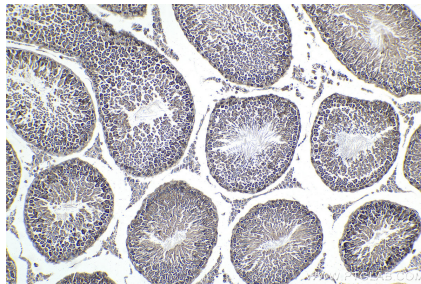
Immunohistochemical analysis of paraffin-embedded mouse stomach tissue slide using KHC1731 (BECN1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using KHC1731 (BECN1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat stomach tissue slide using KHC1731 (BECN1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat testis tissue slide using KHC1731 (BECN1 IHC Kit).