



## Mouse Anti-Beclin-1 [E8]: MC0212, MC0212RTU7

**Intended Use:** For Research Use Only

**Description:** Beclin-1 is an essential protein for the initiation of autophagy, the type II programmed cell death pathway. This 60 kDa protein is induced during autophagy, binds with additional autophagic proteins to regulate the formation of the autophagosome. While Beclin-1 is broadly expressed in most normal tissues, its expression was found to be weak in the normal gastric and colonic mucosa. In contrast, Beclin-1 was monoallelically deleted in approximately 40-75% of human breast, cervical, ovarian, and prostate cancers. Further, lower Beclin-1 mRNA levels were detected in glioblastoma compared to normal brain tissue from the same subject. Beclin-1 expression is correlative with protein immunoreactivity, and variable loss of beclin-1 expression was observed in cancer cells when compared with adjacent normal tissue, with notable exceptions in gastric and colorectal cancers. In 68% of hepatocellular carcinomas and 33% of esophageal squamous cell carcinomas, beclin-1 immunoreactivity was lost. Multiple studies have determined beclin-1 as an independent prognostic marker, where high expression of beclin-1 is associated with positive prognosis including higher disease-free and overall survival rates.

## **Specifications**

Clone: E8
Source: Mouse
Isotype: IgG2a/k

Reactivity: Human, mouse, rat Immunogen: Human Beclin 1 aa 1-300

Localization: Cytoplasm

Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)

Storage: Store at 2°-8°C

Applications: IHC, Flow Cyt., ICC/IF, IP, WB

Package:

| Description           | Catalog No. | Size |
|-----------------------|-------------|------|
| Beclin-1 Concentrated | MC0212      | 1 ml |
| Beclin-1 Prediluted   | MC0212RTU7  | 7 ml |

## IHC Procedure\*

Positive Control: Kidney and breast cancer tissues

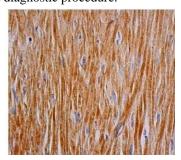
Concentrated Dilution: 50-200

Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath

at 95°-99°C

Incubation Time and Temp: 30-60 minutes @ RT

Detection: Refer to the detection system manual \* Result should be confirmed by an established diagnostic procedure.



FFPE human smooth muscle stained with anti-Beclin-1 using DAB

## **References:**

- 1. The relation of beclin 1 and bcl-2 expressions in high grade prostatic intraepithelial neoplasia and prostate adenocarcinoma: a tissue microarray study. Baspinar S, et al. Pathol Res Pract. Jul;210(7):412-8, 2014.
- 2. Beclin 1 expression is an independent prognostic factor for gastric carcinomas. Yu M, et al. Tumour Biol. 2013 Apr;34(2):1071-83, 2013.

Doc. 100-MC0212

Rev. B

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