

Mouse Anti-Beclin-1 [9A1.1]: MC0212

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. In contrast, loss of beclin-1 was associated with increased depth of invasion, lymph node metastasis and higher tumor grade.

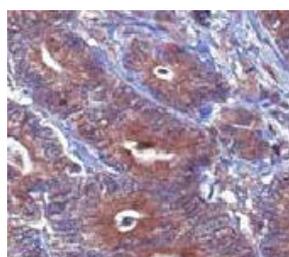
Specifications

Clone:	9A1.1
Source:	Mouse
Isotype:	IgG2a/k
Reactivity:	Human
Localization:	Cytoplasm
Formulation:	Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, Flow Cyt., WB
Package:	

Description	Catalog No.	Size
Beclin-1 Concentrated	MC0212	1 ml

IHC Procedure

Positive Control:	Colorectal adenocarcinoma
Concentrated Dilution:	50-200
Pretreatment:	Citrate pH6.0 or EDTA pH8.0, 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 colorectal carcinoma tissue 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.