

PRODUCT DATA SHEET

Bioworld Technology,Inc.

Beclin-1 monoclonal antibody

Catalog: MB66537 Host: Mouse Reactivity: Human, Mouse, Rat, Monkey, Hamster

BackGround:

Autophagy is a catabolic process for the autophagosomic-lysosomal degradation of proteins activated in response to nutrient deprivation and in neurodegenerative conditions. One of the proteins critical to this process is Beclin-1, the mammalian orthologue of the yeast autophagy protein Apg6/Vps30. Beclin-1 can complement defects in yeast autophagy caused by loss of Apg6 and can also stimulate autophagy when overexpressed in mammalian cells. Mammalian Beclin-1 was originally isolated in a yeast two-hybrid screen for Bcl-2 interacting proteins and has been shown to interact with Bcl-2 and Bcl-xL, but not with Bax or Bak. While Beclin-1 is generally ubiquitously expressed, research studies have shown it is monoallelically deleted in 40-75% of sporadic human breast and ovarian cancers. Beclin-1 is localized within cytoplasmic structures including the mitochondria, although overexpression of Beclin-1 reveals some nuclear staining and CRM1-dependent nuclear export. Investigators have demonstrated that Beclin-1-/- mice die early in embryogenesis and Beclin-1-/+ mice have a high incidence of spontaneous tumors. Stem cells from the null mice demonstrate an altered autophagic response, although responses to apoptosis appeared normal. Researchers have also found that overexpression of Beclin-1 in virally infected neurons in vivo resulted in significant protection against Sindbis virus-induced disease and neuronal apoptosis.

Product:

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.

Molecular Weight:

~ 60 kDa

Swiss-Prot:

O14457

Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

Applications:

WB (1/500 - 1/1000)

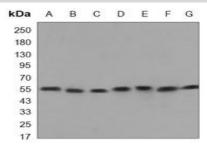
Storage&Stability:

Store at $4 \, \mathbb{C}$ short term. Aliquot and store at $-20 \, \mathbb{C}$ long term. Avoid freeze-thaw cycles.

Specificity:

Recognizes endogenous levels of Beclin-1 protein.

DATA:



Western blot analysis of Beclin-1 expression in Hela (A), NIH3T3 (B), C6 (C), COS7 (D), CHOK1 (E), rat brain (F), Jurkat (G) whole cell lysates.

Note:

For research use only, not for use in diagnostic procedure.

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