

PRODUCT DATA SHEET

Bioworld Technology,Inc.

Beclin-1 Rabbit monoclonal antibody

Catalog: MB66287 Host: Rabbit Reactivity: Human, Mouse, Rat

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 50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA.

Molecular Weight:

~ 60 kDa

Swiss-Prot:

Q14457

Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

Applications:

WB (1/500 - 1/1000), IP (1/10 - 1/50)

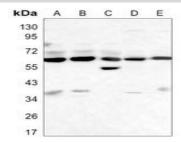
Storage&Stability:

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

Specificity:

Recognizes endogenous levels of Beclin-1 protein.

DATA:



Western blot analysis of Beclin-1 expression in K562 (A), rat brain (B), C6 (C), NIH3T3 (D), Hela (E) whole cell lysates.

Note:

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

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