E90562

Beclin-1Polyclonal Antibody

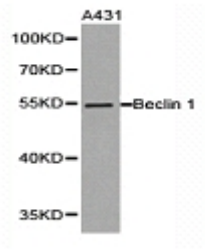
Catalog Number: E90562
Amount: 100ul
Background: Autophagy is a catabolic process for the autophagosomic-lysosomal degradation of proteins activated in response to nutrient deprivation and in neurodegenerative conditions (1). One of the proteins critical to this process is Beclin-1, the mammalian orthologue of the yeast autophagy protein Apg6/Vps30 (2). Beclin-1 can complement defects in yeast autophagy caused by loss of Apg6 and can also stimulate autophagy when overexpressed in mammalian cells (3). 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 (4). While Beclin-1 is generally ubiquitously expressed, it is monoallelically deleted in 40-75% of sporadic human breast and ovarian cancers (5). It is localized within cytoplasmic structures including the mitochondria, although overexpression of Beclin-1 reveals some nuclear staining and CRM1-dependent nuclear export (6). 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 (7). Overexpression of Beclin-1 in virally infected neurons in vivo resulted in significant protection against Sindbis virus-induced disease and neuronal apoptosis (4).
Species: Rabbit
Isotype: IgG
Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Synonyms: BECN1;ATG6;VPS30;beclin1;
Immunogen: Recombinant protein of human Beclin-1
Purification: Affinity purification
Reactivity: H M
Applications: WB IHC IP
Molecular Weight: 52kDa
Swiss-Prot No. : Q14457
Gene ID: 8678
References: 1. Reggiori, F. and Klionsky, D.J. (2002) Eukaryot Cell 1, 11-21. 2. Kametaka, S. et al. (1998) J Biol Chem 273, 22284-91. 3. Liang, X.H. et al. (1999) Nature 402, 672-6. 4. Liang, X.H. et al. (1998) J Virol 72, 8586-96. 5. Aita, V.M. et al. (1999) Genomics 59, 59-65. 6. Liang, X.H. et al. (2001) Cancer Res 61, 3443-9. 7. Yue, Z. et al. (2003) Proc Natl Acad Sci U S A 100, 15077-82.

For Research Use Only

WB 1:200 - 1:500

IHC 1:50- 1:100

IP 1:20- 1:50



Western blot analysis of extracts of A431 cellline, using Beclin-1antibody.

For Research Use Only