



Recombinant Mouse Beclin-1 (Becn1)

Product Code	CSB-EP002658MO
Relevance	Plays a central role in autophagy (PubMed:10604474, PubMed:12372286, PubMed:19270693). Acts as core subunit of different PI3K complex forms that mediate formation of phosphatidylinositol 3-phosphate and are believed to play a role in multiple membrane trafficking pathways: PI3KC3-C1 is involved in initiation of autophagosomes and PI3KC3-C2 in maturation of autophagosomes and endocytosis (PubMed:19270693, PubMed:25275521). Involved in regulation of degradative endocytic trafficking and required for the abscission step in cytokinesis, probably in the context of PI3KC3-C2 (By similarity). Essential for the formation of PI3KC3-C2 but not PI3KC3-C1 PI3K complex forms (PubMed:25275521). Involved in endocytosis including endosome formation in neuronal cells (PubMed:25275521). May play a role in antiviral host defense (By similarity).
Abbreviation	Recombinant Mouse Becn1 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	O88597
Alias	Coiled-coil myosin-like BCL2-interacting protein
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MEGSKASSSTMQVSFVCQRCSQPLKLDTSFKILDRVITIQELTAPLLTTAAKPG ETQEEEAANSGEPIETRQDGVSRFPARMSTESANSFTLIGEASDGGTM ENLSRRLKVTGDLFDIMSGQTDVDHPLCEECDTLLDQLDTQLNVTENECQNY KRCLEILEQMNEDDSEQLQRELKELALEEERLIQELEDVEKNRKVVAENLEKVV AEAERLDQEEAQYQREYSEFKRQQLDELKSVENQVRYAQIQLDKLKKTN VFNATFHIWHSGQFGTINNFRLLGRLPSPVEWNEINAAWGQTVLLLHALANKM GLKFQRYRLVPYGNHSYLSLTDKSKELPLYCSGGLRFFWDNKFHAMVAFL DCVQQFKEEVEKGETRFCLPYRMDVEKGKIEDTGGSGGSYSIKTQFNSEEQW TKALKFMLTNLKWGLAWVSSQFYNK
Research Area	Epigenetics and Nuclear Signaling
Source	E.coli
Target Names	Becn1
Protein Names	Recommended name: Beclin-1 Alternative name(s): Coiled-coil myosin-like BCL2-interacting protein
Expression Region	1-448aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at



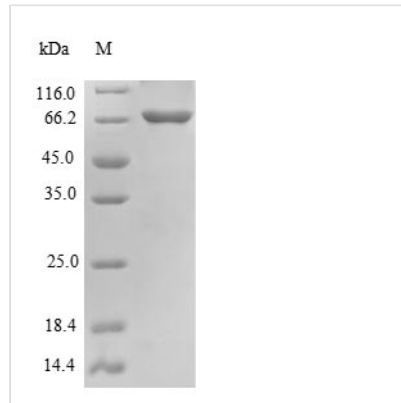
4°C for up to one week.

Tag Info N-terminal 6xHis-SUMO-tagged

Mol. Weight 67.6kDa

Protein Length Full Length

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The gene coding for the Mouse Becn1 protein (1-448aa) is introduced into a plasmid vector, creating recombinant plasmid that is subsequently transformed into e.coli cells. e.coli cells capable of surviving in the presence of a specific antibiotic are selected and then cultured under conditions favorable for the expression of the gene of interest. A N-terminal 6xHis-SUMO tag is attached to the protein. Post-expression, the recombinant Mouse Becn1 protein is isolated and purified from the cell lysate using affinity purification. Denaturing SDS-PAGE is applied to resolve the resulting recombinant Mouse Becn1 protein, revealing a purity exceeding 90%.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.