



Recombinant Candida glabrata Serine/threonine-protein kinase ATG1 (ATG1), partial

Product Code	CSB-EP738902CZI
Relevance	Serine/threonine protein kinase involved in the cytoplasm to vacuole transport (Cvt) and found to be essential in autophagy, where it is required for the formation of autophagosomes. Involved in the clearance of protein aggregates which cannot be efficiently cleared by the proteasome. Required for selective autophagic degradation of the nucleus (nucleophagy) as well as for mitophagy which contributes to regulate mitochondrial quantity and quality by eliminating the mitochondria to a basal level to fulfill cellular energy requirements and preventing excess ROS production. Also involved in endoplasmic reticulum-specific autophagic process, in selective removal of ER-associated degradation (ERAD) substrates. Plays a key role in ATG9 and ATG23 cycling through the pre-autophagosomal structure and is necessary to promote ATG18 binding to ATG9 through phosphorylation of ATG9.
Abbreviation	Recombinant Candida glabrata ATG1 protein, partial
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.	Q6FL58
Alias	Autophagy-related protein 1
Product Type	Recombinant Protein
Immunogen Species	Candida glabrata (strain ATCC 2001 / CBS 138 / JCM 3761 / NBRC 0622 / NRRL Y-65) (Yeast) (Torulopsis glabrata)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	YVVEKEIGKGSFATVYRGHVTTDPKSHIAVKAVARSKLKNKKLLENLEIEIAILKK IKHPHIVGLIDCERTTTDFYLVMDYCALGDLTFLIKKRKELENNHPLLQTVFNKY PPPSKEHNGLNRAFVVCYLQQLASALKFLRSKNLVHRDIKPQNLLLATPLTNRY DSKTFHELGYVGIYNLPILKIADFGFARFLPSTSLAETLCGSPLYMAPEILNYQK YNAKADLWSVGTVLFEMCCGVPPFTASNHLELFKKIKRAHDEINFPEVCEVED GLKELICSLTTFDPAKRIGFEEFFNNKIV
Research Area	Others
Source	E.coli
Target Names	ATG1
Protein Names	Recommended name: Serine/threonine-protein kinase ATG1 EC=2.7.11.1 Alternative name(s): Autophagy-related protein 1
Expression Region	11-312aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at

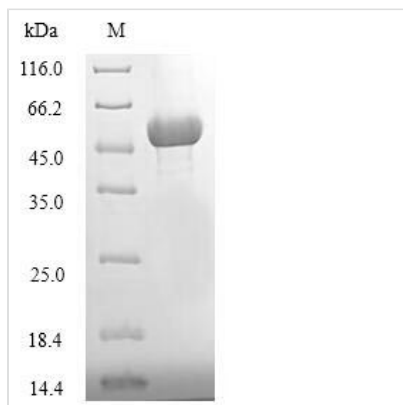
4°C for up to one week.

Tag Info N-terminal 6xHis-tagged

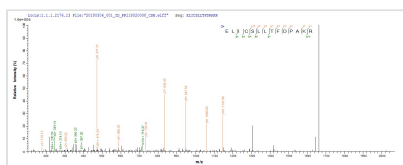
Mol. Weight 38.4kDa

Protein Length	Partial
----------------	---------

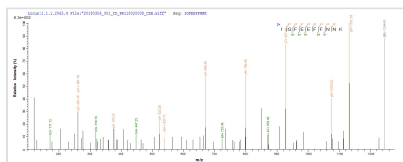
Image



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



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP738902CZ1 could indicate that this peptide derived from E.coli-expressed *Candida glabrata* (strain ATCC 2001 / CBS 138 / JCM 3761 / NBRC 0622 / NRRL Y-65) (Yeast) (*Torulopsis glabrata*) ATG1.



Based on the SEQUEST from database of *E. coli* host and target protein, the LC-MS/MS Analysis result of CSB-EP738902CZ1 could indicate that this peptide derived from *E. coli*-expressed *Candida glabrata* (strain ATCC 2001 / CBS 138 / JCM 3761 / NBRC 0622 / NRRL Y-65) (Yeast) (*Torulopsis glabrata*) ATG1.

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.