Data Sheet (Cat.No.TMPH-00340)

TargetMol

ATG1 Protein, Candida glabrata, Recombinant (His)

General Information

Synonyms:	Autophagy-related protein 1;Serine/threonine-protein kinase ATG1;ATG1
Protein Construction:	11-312 aa
Species:	Candida glabrata
Expression Host:	E. coli
Accession:	Q6FL58
Molecular Weight:	38.4 kDa (predicted)
AA Sequence:	YVVEKEIGKGSFATVYRGHVTTDPKSHIAVKAVARSKLKNKKLLENLEIEIAILKKIKHPHIVGLIDCERTTTDFYL VMDYCALGDLTFLIKKRKELENNHPLLQTVFNKYPPPSKEHNGLNRAFVVCYLQQLASALKFLRSKNLVHRDI KPQNLLLATPLTNYRDSKTFHELGYVGIYNLPILKIADFGFARFLPSTSLAETLCGSPLYMAPEILNYQKYNAKA DLWSVGTVLFEMCCGVPPFTASNHLELFKKIKRAHDEINFPEVCEVEDGLKELICSLLTFDPAKRIGFEEFFNNKI V

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90% as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Tris-based buffer, 50% glycerol

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481