

Cysteine protease ATG4a (ATG4A), Recombinant Protein

Cat RP05090

Size 0.02 mg (E-Coli)/ 0.02 mg (Yeast)/ 0.1 mg (E-Coli)/ 0.1 mg (Yeast)/ 0.02 mg (Baculovirus)/ 0.02 mg (Mammalian-Cell)/ 0.1

mg (Baculovirus)/ 1 mg (E-Coli)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Yeast)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)
Species Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant Arabidopsis thaliana Cysteine protease ATG4a (ATG4A)

Product Gene Name

ATG4A recombinant protein

Product Synonym Gene Name

ATG4A

Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

Sequence

MKALCDRFVP QQCSSSSKSD THDKSPLVSD SGPSDNKSKF TLWSNVFTSS SSVSQPYRES STSGHKQVCT
TRNGWTAFAVK RVSMASGAIR RFQERVLGPN RTGLPSTTSD VWLLGVCIKI SADENSGETD TGTVLAALQL
DFSSKILMTY RKGFEPRDRT TYTSDVNWGC MIRSSQMLFA QALLFHLGR AWTKKSELPE QEYLETLEPF
GDSEPSAFSI HNLIAGASY GLAAGSWVGP YAICRAWESL ACKKRKQTDK KNQTLPMVAH IVSGSEDGER
GGAPILCIED ATKSCLEFSK GQSEWTPIL LVPLVLGLDS VNPRYIPSLV ATFTFPQSVG ILGGKPGAST
YIVGVQEDKG FYLDPHEVQQ VVTVNKETPD VDTSSYHCNV LRYVPLESLD PSLALGFYCR DKDDFDDFCL
RALKLAEESN GAPLFTVTQT HTAINQSNYG FADDDSEDER EDDWQML

Sequence Positions

1-467, Full length protein

Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

Host

E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

46,875 Da

Storage

Store at -20°C. For long-term storage, store at -20°C or -80°C. Store working aliquots at 4°C for up to one week. Repeated freezing and thawing is not recommended.

Protein Family

Cysteine protease

NCBI Accession

NP_001318423.1

NCBI GI

1063703263

NCBI GenBank Nucleotide

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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mg (Baculovirus)/ 1 mg (E-Coli)/ 0.1 mg (Mammalian-Cell)/ 1

mg (Yeast)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)

NCBI GeneID

819020

NCBI Official Full Name

Peptidase family C54 protein

NCBI Official Symbol

AT2G44140

NCBI Official Synonym Symbols

F6E13.27

NCBI Protein Information

Peptidase family C54 protein

UniProt Gene Name

ATG4A

UniProt Synonym Gene Names

APG4A; AtAPG4a; Protein autophagy 4a

UniProt Protein Name

Cysteine protease ATG4a

UniProt Synonym Protein Names

Autophagy-related protein 4 homolog a; AtAPG4a; Protein autophagy 4a

UniProt Primary Accession

Q8S929

UniProt Secondary Accession

O80583; Q3EBG5

UniProt Related Accession

Q8S929

UniProt Comments

Cysteine protease required for autophagy, which is able to cleave the C-terminal part of ATG8 that may be subsequently converted to a smaller form, with a revealed C-terminal glycine. ATG8 is then activated by ATG7 and is subsequently attached to ATG3, another E2-like enzyme, after which the C-terminal glycine of ATG8 is conjugated to phosphatidylethanolamine by an amide bond. This conjugated form has the capacity for the binding to autophagosomes.

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