

Division of Signal Transduction Therapy

Standard Operation Procedure

Preparation of His-ATG7

Enzyme description:- His-ATG7 (1- 703 = full length)

Clone number:- DU40179

Source:- human recombinant

Tag:- N-terminal His₆-

Purification method:- Ni-Sepharose

Expression system:- baculovirus in Sf21 cells

Calculated molecular mass:-

Monoisotopic 81278 Da
Average Mass 81327 Da
[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 6.12

Purity:- >90%

Enzyme storage buffer:-

50 mM HEPES pH 7.5, 10% glycerol, 150mM NaCl, 1mM DTT

Storage temperature:- -80°C

Assay:-

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Clone Data Sheet

His-ATG7

Protein ATG7 (1-703)
Synonyms APG7-LIKE; APG7L; GSA7
Clone Number DU40179
Species Human
Accession Number NP_006386
Tags His₆-

Aminoacid sequence of the expressed protein

MSYYHHHHHDYDIPTTENLYFQGAMGSM**AAATGDPGLSKLQFAPFS**
SALDVGFWHEL**TQKKLNEYRLDEAPKDIKGY**YNGDSAGL**PARL****TLE**
FSAFDMSAP**TPARCCPAIGTLY**NTNT**LESFKTADKLLLEQAANEIW**
ESIKSGTALENPVLLNK**FLLLT**FADL**KKYHFY**WFCYPAL**CLPESLP**
LIQGPVGLDQRFSLKQIEALECAYDNLCQTEGVTALPYFLIKYDENM
VLVSLLKHYSDF**FQ**Q**RTKITIGVYDPCNLAQYPGWPLRNFLVLA**AH
RWSSSFQSVEV**VCFRDRTM**Q**GA**RDVAHS**II**FEVK**LPEMAFSPDCPKA**
VGWEKNQKGGMGPRMVNLSE**CM**DPK**RLAESSVDLNLKLMCWRLVPTL**
DLDKVVSVK**CLLLGAGTLGCNVARTLMGWV**RHIT**FVDNAKISYSNP**
VRQPLYEFEDCLGGGKPKALAAADRLQKIFPGVNARGFNMSIPMPGH
PVNFSSVTLEQARRDVEQLEQLIESHDVVFLMDTRESRWLPAVIAA
SKRKLVINAALG**FD**TFV**MRHGLKKPKQ**Q**GAGDLCPNHPVASADLLG**
SSLFANIPGYKLGCY**FCNDVVAPGDSTRDRTL**D**Q**Q**CTVSRPGLAVIA**
GALAVELMVSVL**QH**PEGGYA**IASSSDDRMNEPPTSLGLVPHQIRGFL**
SRFDNVLPVSLAFDKCTACSSKVLD**QYEREGFNFLAKVFNSSHSFLE**
DLTGLTLLHQETQAAEI**WDMSDDETI**

Native sequence residues 1-703 = full length in bold
Protease cleavage TEV underlined
Cloning sites BamHI / NotI

**DNA sequence of
insert**

ggatccatggcggcagctacgggggatcctggactctctaaactgca
gtttgccccttttagtagtgcccttgatggtgggttttggcatgagt
tgaccagaagaagctgaacgagtatcggctggatgaagctcccaag
gacattaagggttattactacaatggtgactctgctgggctgccagc
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