

Division of Signal Transduction Therapy

Standard Operation Procedure

Preparation of GST-ATG3

Enzyme description:- GST-ATG3 1-314 (full length)

Clone number:- DU31143

Source:- BL21 recombinant

Tag:- N-terminal GST-tag

Purification method:- GSH-Sepharose

Expression level:- 1mg/L

Calculated molecular mass:-

Monoisotopic 62648 Da

Average Mass 62686 Da

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 4.83

Purity:- 90%

Enzyme storage buffer:-

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

Storage temperature:- -80°C

Assay:-

Not tested yet.

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Clone Data Sheet

GST-ATG3

Protein ATG3
Synonyms Apg3, APG3L
Clone Number DU31143
Species Human
Accession Number Protein: NP_071933 DNA: NM_022488
Tags N-terminal GST-tag

Aminoacid sequence of the expressed protein
MSPILGYWKIKGLVQPTRLLEYLEEKYEEHLYERDEGDKWRNKKFELGL
EFPNLPYYIDGDVKLQTSMAIIRYIADKHNMLGGCPKERAEISMLEGAVL
DIRYGVSRIAYSKDFETLKVDFLSKLPPEMLKMFEDRLCHKTYLNGDHVTH
PDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAIPOIDKYLKSSKYIA
WPLQGWQATFGGGDHPKSDLEVLFOGPLGSMQNVINTVKGKALEVAEYL
TPVLKESKFKETGVITPEEFVAAGDHLVHHCPTWQWATGEELKVKAYLPT
GKQFLVTKNVP CYKRCKQMEYSDELEAIEEDDGGGWVDTYHNTGITGI
TEAVKEITLENKDNIRLQDCSALCEEEDEDEGEAADMEEYEEESGLLETD
EATLDRKIVEACKAKTDAGGEDAILQTRTYDLYITYDKYYQTPRLWLF
YDEQRQPLTVEHMYEDISQDHVKKTVTIENHPLPPPPMCSVHPCRHA
EV MKKIETVAEGGGELGVHMYLLIFLKFVQAVIPTIEYDYTRHFTM

Native sequence in bold
Protease cleavage Precission protease site underlined
Cloning sites BamH1 / NotI

DNA sequence of insert
GGATCCATGCAGAAATGTGATTAATACTGTGAAGGGAAAGGCACTGGAAGT
GGCTGAGTACCTGACCCCGGTCTCAAGGAATCAAAGTTTAAAGGAAACAG
GTGTAATTACCCAGAAAGAGTTTGTGGCAGCTGGAGATCACCTAGTCCAC
CACTGTCCAACATGGCAATGGGCTACAGGGGAAGAATTGAAAAGTGAAGGC
ATACCTACCAACAGGCAAACAATTTTTGGTAACCAAAAATGTGCCGTGCT
ATAAGCGGTGCAAACAGATGGAATATTCAGATGAATTGGAAGCTATCATT
GAAGAAGATGATGGTGTGGCGGATGGGTAGATACATATCACAAACACAGG
TATTACAGGAATAACGGAAGCCGTTAAAGAGATCACACTGGAAAATAAGG
ACAATATAAGGCTTCAAGATTGCTCAGCACTATGTGAAGAGGAAGAAGAT
GAAGATGAAGGAGAAGCTGCAGATATGGAAGAATATGAAGAGAGTGGATT
GTTGGAACAGATGAGGCTACCCTAGATACAAGGAAAATAGTAGAAGCTT
GTAAAGCCAAAACACTGATGCTGGCGGTGAAGATGCTATTTTGCAAACCAGA
ACTTATGACCTTTACATCACTTATGATAAATATTACCAGACTCCACGATT
ATGGTTGTTTGGCTATGATGAGCAACGGCAGCCTTTAACAGTTGAGCACA
TGTATGAAGACATCAGTCAGGATCATGTGAAGAAAACAGTGACCATTGAA
AATCACCTCATCTGCCACCACCTCCCATGTGTTTCAGTTCACCCATGCAG
GCATGCTGAGGTGATGAAGAAAATCATTGAGACTGTTGCAGAAGGAGGGG
GAGAACTTGGAGTTCATATGTATCTTCTTATTTCTTGAAATTTGTACAA
GCTGTCATTCCAACAATAGAATATGACTACACAAGACACTTCACAATGTA

AGCGCCGC