

Division of Signal Transduction Therapy

Standard Operating Procedure

Preparation of active MET [1051 - 1349]

<u>Enzyme description:-</u>	MET [1051 – 1349]
<u>Clone number:-</u>	DU 61348
<u>Source:-</u>	Recombinant
<u>Expression system:-</u>	Baculovirus expression vector system
<u>Tag:-</u>	N-terminal GST
<u>Purification method:-</u>	GSH Sepharose

Calculated molecular mass:-

Monoisotopic 60, 683.10 daltons
Average Mass 60, 722.54 daltons
[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 6.68

Purity:- >80 %

Activation protocol:- Constitutively active

Enzyme storage buffer:-

50 mM Tris-HCl pH 7.5, 150 mM NaCl, 270 mM sucrose, 0.1 mM EGTA,
0.1 % 2-mercaptoethanol, 0.02 % Brij-35, 1 mM benzamidine, 0.2 mM PMSF

Storage temperature:- -70 °C

Assay buffer:-

50 mM Tris-HCl pH 7.5, 0.1 mM EGTA, 0.1 % 2-mercaptoethanol, 10 mM MgAc

Substrate:-

GGMEDIYFEFMGGKKK Final concentration: 300 uM

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Clone Data Sheet

MET [1051 - 1349]

Protein MET [956 - 1349]

Clone number DU 61348

Species Human

Accession number NM_000245.4

Tags N-terminal GST

Baculovirus expressed protein

MSPILGYWKIKGLVQPTRLLEYLEEKYEEHLYERDEGDKWRNKKFEL
GLEFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERAIEISMLE
GAVLDIRYGVSR IAYS KDFETLKVDFLSKLPPEMLKMFEDRLCHKTYLN
GDHVTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAI PQIDKY
LKSSKYIAWPLQGWQATFGGGDHPKSDLEVL FQGPLG SVHIDLSALN
PELVQAVQHVVIGPSSLI VHFNEVIGRGHFGCVYHGTL DNDGKKIHC
AVKSLNRITDIGEVSQFLTEGIIMKDFSHPNVLSLLGICLRSEGSPLV
VLPYMKHGDLRNFIRNETHNPTVKDLIGFGLQVAKGMKYLASKKFVHR
DLAARNCMLDEKFTVKVADFGLARDMYDKEYYSVHNKTGAKLPVKWMA
LESLOTQKFTTKSDVWSFGVLLWELMTRGAPPYPDVNTFDITVYLLQG
RRLLOPEYCPDPLYEVM LKCWHPKAEMRPSFSELVSRISAI FSTFIGE
HY

Native sequence Amino acids V1051– Y1390 (end) of human MET.

Residue V232 of the fusion protein is equivalent to V1051 of the native enzyme. The GST tag is located at residues 1 – 220.

Protease cleavage PreScission site (LEVLFQGP) residues 221 – 228

Cloning sites *Bam*H1 and *Not*1 sites of pFastBac GST 6P1

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Nucleotide
sequence of
insert

ggatccGTCCACATTGACCTCAGTGCTCTAAATCCAGAGCTGGTCCAG
GCAGTGCAGCATGTAGTGATTGGGCCAGTAGCCTGATTGTGCATTTT
AATGAAGTCATAGGAAGAGGGCATTGTTGGTTGTGTATATCATGGGACT
TTGTTGGACAATGATGGCAAGAAAATTCAGTGTGCTGTGAAATCCTTG
AACAGAATCACTGACATAGGAGAAGTTTCCCAATTTCTGACCGAGGGA
ATCATCATGAAAGATTTTAGTCATCCCAATGTCCTCTCGCTCCTGGGA
ATCTGCCTGCCAAGTGAAGGGTCTCCGCTGGTGGTCTTACCATACATG
AAACATGGAGATCTTCGAAATTTTCATTCGAAATGAGACTCATAATCCA
ACTGTAAAAGATCTTATTGGCTTTGGTCTTCAAGTAGCCAAAGGCATG
AAATATCTTGCAAGCAAAAAGTTTGTCCACAGAGACTTGGCTGCAAGA
AACTGTATGCTGGATGAAAAATTCACAGTCAAGGTTGCTGATTTTGGT
CTTGCCAGAGACATGTATGATAAAGAATACTATAGTGTACACAACAAA
ACAGGTGCAAAGCTGCCAGTGAAGTGGATGGCTTTGGAAAGTCTGCAA
ACTCAAAGTTTACCACCAAGTCAGATGTGTGGTCTTTGGCGTGCTC
CTCTGGGAGCTGATGACAAGAGGAGCCCCACCTTATCCTGACGTAAAC
ACCTTTGATATAACTGTTTACTTGTGCAAGGGAGAAGACTCCTACAA
CCCGAATACTGCCAGACCCCTTATATGAAGTAATGCTAAAATGCTGG
CACCCTAAAGCCGAAATGCGCCATCCTTTTCTGAACTGGTGTCCCGG
ATATCAGCGATCTTCTCTACTTTCATTGGGGAGCACTATtaggcggcc
gc