

Product datasheet for RC217003

MET (NM_000245) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MET (NM_000245) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MET
Synonyms:	AUTS9; c-Met; DFNB97; HGFR; RCCP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217003 representing NM_000245 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGGCCCCCGCTGTGCTTGCACCTGGCATCCTCGTGCTCCTGTTTACCTTGGTGCAGAGGAGCAATG
GGGAGTGTAAAGAGGCACTAGCAAAGTCCGAGATGAATGTGAATATGAAGTATCAGCTTCCCACTTCCAC
CGCGGAAACACCCATCCAGAATGTCATTCTACATGAGCATCACATTTTCCCTTGGTGCCACTAACTACATT
TATGTTTTAAATGAGGAAGACCTCAGAAGTTGCTGAGTACAAGACTGGCCTGTGCTGGAACACCCAG
ATTGTTTCCCATGTCAGGACTGCAGCAGCAAAGCCAATTTATCAGGAGGTGTTTGGAAAGATAACATCAA
CATGGCTCTAGTTGTCGACACCTACTATGATGATCAACTATTAGCTGTGGCAGCGTCAACAGAGGGACC
TGCCAGCGACATGTCTTTCCCAACAATCATACTGCTGACATACAGTCGGAGGTTCACTGCATATTCTCCC
CACAGATAGAAGAGCCCAGCCAGTGTCTGACTGTGTGGTGAAGCGCCCTGGGAGCCAAAGTCTTTTCATC
TGTAAGGACCGGTTCACTCAACTTCTTTGTAGGCAATACCATAAATCTTCTTATTTCCAGATCATCCA
TTGCATTCGATATCAGTGAGAAGGCTAAAGGAAACGAAAGATGGTTTTATGTTTTGACGGACAGTCTCT
ACATTGATGTTTTACCTGAGTTCAGAGATTCTTACCCATTAAGTATGTCATGCCTTTGAAAGCAACAA
TTTTATTTACTTCTTGACGGTCCAAAGGAAACTCTAGATGCTCAGACTTTTACACAAGAATAATCAGG
TTCTGTTCCATAAACTCTGGATTGCATTCCTACATGAAAATGCCTCTGGAGTGTATTCTCACAGAAAAGA
GAAAAAGAGATCCACAAGAAGGAAAGTGTAAATATACTTACAGGCTGCGTATGTCAGCAAGCCTGGGGC
CCAGCTTGCTAGACAAATAGGAGCCAGCCTGAATGATGACATTCTTTTCGGGGTGTTCGCACAAAGCAAG
CCAGATTCTGCCGAACCAATGGATCGATCTGCCATGTGTGCATTCCCTATCAAATATGTCAACGACTTCT
TCAACAAGATCGTCAACAAAAACAATGTGAGATGTCTCCAGATTTTTACGGACCAATCATGAGCACTG
CTTTAATAGGACACTTCTGAGAAATTCATCAGGCTGTGAAGCGCGCCGTGATGAATATCGAACAGAGTTT
ACCACAGCTTTGCAGCGGTTGACTTATTCATGGGTCAATTCAGCGAAGTCTCTTAACATCTATATCCA
CCTTCATTAAGGAGACCTCACCATAGCTAATCTTGGGACATCAGAGGGTCGCTTCATGCAGGTTGTGGT
TTCTCGATCAGGACCATCAACCCTCATGTGAATTTCTCTGGACTCCCATCCAGTGTCTCCAGAAGT



ATTGTGGAGCATACATTAACCAAAATGGCTACACACTGGTTATCACTGGGAAGAAGATCACGAAGATCC
CATTGAATGGCTTGGGCTGCAGACATTTCCAGTCTGCAGTCAATGCCTCTCTGCCCCACCTTTGTTCA
GTGTGGCTGGTGGCCACGACAAATGTGTGCGATCGGAGGAATGCCTGAGCGGGACATGGACTCAACAGATC
TGTCTGCCTGCAATCTACAAGTTTTCCAAATAGTGCACCCCTGAAGGAGGGACAAGGCTGACCATAT
GTGGCTGGGACTTTGGATTTCCGAGGAATAATAAATTTGATTTAAAGAAAAGTACAGTTCCTTGGAAA
TGAGAGCTGCACCTTGACTTTAAGTGAGAGCACGATGAATACATTGAAATGCACAGTTGGTCTGCCATG
AATAAGCATTCAATATGTCCATAATTAATTTCAAATGGCCACGGGACAACAACATACAGTACATCTCCT
ATGTGGATCCTGTAATAACAAGTATTTCCGCGAAATACGGTCTATGGCTGGTGGCACTTTACTTACTTT
AACTGGAAATTACCTAAACAGTGGGAATCTAGACACATTTCAATTGGTGGAAAAACATGACTTTAAAA
AGTGTGTCAAACAGTATTCTTGAATGTTATACCCAGCCCAAACCATTTCAACTGAGTTTGTGTTAAAT
TGAAAAATTGACTTAGCCAACCGAGAGACAAGCATCTTCAGTTACCGTGAAGATCCCATTGTCTATGAAAT
TCATCCAACCAATCTTTTATTAGTGGTGGGAGCACAATAACAGGTGTTGGGAAAAACCTGAATTCAGT
AGTGTCCCAGAAATGGTCATAAATGTGCATGAAGCAGGAAGAACTTTACAGTGGCATGTCAACATCGCT
CTAATTCAGAGATAATCTGTTGTACCCTCCTTCCCTGCAACAGCTGAATCTGCAACTCCCCTGAAAAC
CAAAGCCTTTTTCATGTTAGATGGGATCCTTTCCAAACTTTGATCTCATTATGTACATAATCCTGTG
TTTAAGCCTTTTAAAAGCCAGTGATGATCTCAATGGGCAATGAAAATGTACTGGAAATTAAGGGAAATG
ATATTGACCTGAAGCAGTTAAAGGTGAAGTGTAAAAAGTTGAAAATAAGAGCTGTGAGAATATACACT
ACATTCTGAAGCCGTTTTATGCACGGTCCCAATGACCTGCTGAAATGAAACAGCGAGCTAAATATAGAG
TGGAAGCAAGCAATTTCTTCAACCGTCTTGGAAAAGTAATAGTTCAACCAGATCAGAATTTACAGGAT
TGATTGCTGGTGTGTCTCAATATCAACAGCACTGTTATTACTACTTGGGTTTTCTGTGGCTGAAAA
GAGAAAGCAAATTAAGATCTGGGCAGTGAATAGTTCGCTACGATGCAAGAGTACACACTCCTCATTG
GATAGGCTTGAAGTGCCGAAGTGTAGCCCAACTACAGAAATGGTTTCAAATGAATCTGTAGACTACC
GAGTACTTTTTCCAGAAGATCAGTTTCCATAATTCATCTCAGAACGGTTCATGCCGACAAGTGCAGTACC
TCTGACAGACATGTCCCCATCCTAACTAGTGGGACTCTGATATATCCAGTCCATTACTGCAAAATACT
GTCCACATTGACCTCAGTGTCTAAATCCAGAGCTGGTCCAGGCAGTGCAGCATGTAGTATTGGGCCCA
GTAGCCTGATTGTGCAATTCATGAAGTCATAGGAAGAGGGCATTTTGGTTGTGTATATCATGGGACTTT
GTTGGACAATGATGGCAAGAAAATTCACTGTGCTGTGAAATCCTTGAACAGAATCACTGACATAGGAGAA
GTTTCCCAATTTCTGACCGAGGGAAATCATCATGAAAGATTTTAGTCATCCCAATGTCTCTCGCTCCTGG
GAATCTGCCTGCGAAGTGAAGGGTCTCCGCTGGTGGTCTACCATACATGAAACATGGAGATCTTCGAAA
TTTCATTGCAAAATGAGACTCATAATCCAAGTAAAAGATCTTATTGGCTTTGGTCTTCAAGTAGCCAAA
GGCATGAAATATCTTGAAGCAAAAAGTTGTCCACAGAGACTTGGCTGCAAGAACTGTATGCTGGATG
AAAAATTCACAGTCAAGGTTGCTGATTTTGGTCTTGCCAGAGACATGTATGATAAAGAATACTATAGTGT
ACACAACAAAACAGGTGCAAAGCTGCCAGTGAAGTGGATGGCTTTGGAAAAGTCTGCAAACTAAAAGTTT
ACCACCAAGTCAGATGTGTGGTCTTTGGCGTGTCTCTGGGAGCTGATGACAAGAGGAGCCCCACCTT
ATCCTGATGTAACACCTTTGATATAACTGTTTACTTGTGCAAGGGAGAAGACTCCTACAACCCGAATA
CTGCCAGACCCCTTATATGAAGTAATGCTAAAATGCTGGCACCCATAAGCCGAAATGCGCCCATCCTTT
TCTGAAGTGGTGTCCGGATATCAGCAATCTTCTACTTTTATTGGGGAGCACTATGTCCATGTGAACG
CTACTTATGTGAACGTAATGTGTGCTCCATATCCTTCTCTGTTGTATCAGAAGATAACGCTGATGA
TGAGGTGGACACACGACCAGCCTCCTTCTGGGAGACATCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC217003 representing NM_000245
Red=Cloning site Green=Tags(s)

```

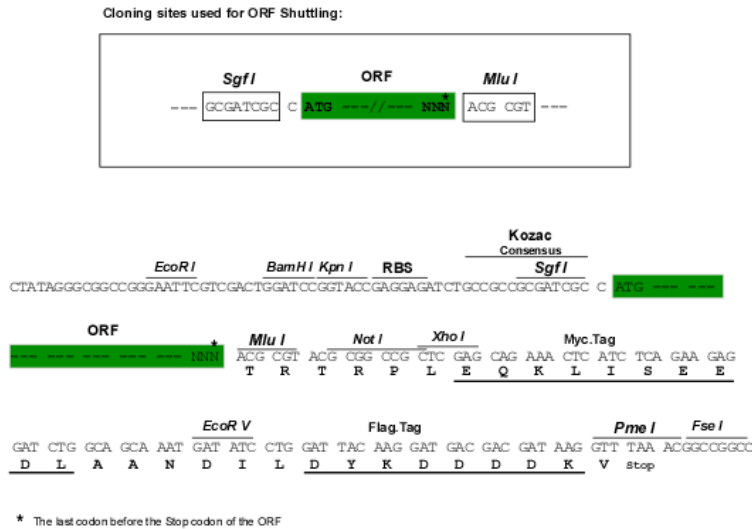
MKAPAVLAPGILVLLFTLVQRSNGECKEALAKSEMNVNMKYQLPNFTAETPIQNVILHEHHIFLGATNYI
YVLNEEDLQKVAEYKTPVLEHPDCFCQDCSSKANLSGGVWKNINMALVVDYTYDDQLISCGSVNRGT
CQRHVFPNHHTADIQSEVHCIFSPQIEEPSQPCDCVVSALGAKVLSVVKDRFINFFVGNINSSYFPDHP
LHSISVRRLEKETKDGFMFLTDQSYIDVLEPEFRDSYPIKYVHAFESNNFIYFLTVQRETLDAQTFHTRIIR
FCSINSLHSYEMPLECILTEKRKRSTKKEVFNILQAAYVSKPGAQLARQIGASLNDLILFGVFAQSK
PDAEPMDRSAMCAFPKIYVNDFFNKIVNKNVNRCLQHFYGNHEHCFNRRTLLRNSGCEARRDEYRTEF
TTALQRVDLFGQFSEVLLTSISTFIKGLTIANLGTSEGRFMQVVVSRSGPSTPHVNFLLDHPVSPVEV
IVEHTLNQNGYTLVITGKKITKIPLNGLGCRHFQSCSQCLSAPPFVQCGWCHDKCVRSEECLSGTWTQQI
CLPAIYKVPNSAPLEGGTRLICGWDFGFRNNKFDLKKTRVLLGNESCTLTLSESTMNTLKCTVGPAM
NKHFNMSSIIISNGHGTQYSTFSYVDPVITSISPKYGPAGGTLLTLGNYLNSGNSRHISIGGKCTLK
SVSNSILECYTPAQTISTEFAVKLKIDLANRETSIFSREDPIVVEIHPKTSFISGGSTITGVGNLNSV
SVPRMVINVHEAGRNFTVACQHRNSEIICCTTPSLQQLNLQLPLKTKAFFMLDGILSKYFDLIYVHNVP
FKPFKPYMISMGNENVLEIKGNDIDPEAVKGEVLKVGNGSCENIHLHSEAVLCTVPNDLLKLNSELNIE
WKQAISSTVLGKVIYQPDQNFGLIAGVVISSTALLLLGGFFLWKKRQIKDLGSELVRYDARVHTPHL
DRLVSARSVSPPTTEMVSNESVDYRATFPEDQFPNSSQNGSCRQVQYPLTDMSPILTSGSDISSPLLQNT
VHIDLALNPQLVQAVQHVVIGPSSLIVHFNEVIGRHFQCVYHGTLNDNDGKKIHCVAKSLNRITDIGE
VSQFLTEGIIMKDFSHPNVLSLLGICLRSEGSPLVVLPMKHGDLRNFIRNETHNPTVKDLIGFGLQVAK
GMKYLASKKFVHRDLAARNCMLDEKFTVKVADFLARDMYDKEYYSVHNKTKAKLPVKWMALESQTQKF
TTKSDVWSFGVLLWELMTRGAPPYDVTNFDITVYLLQGRRLQPEYCPDPLYEVMKCKWHPKAEMRPSF
SELVSRISAIFSTFIGEHYVHVNATYVNVKCVAPYPSLLSSEDNADDEVDRPASFWETS
    
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3029_a11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



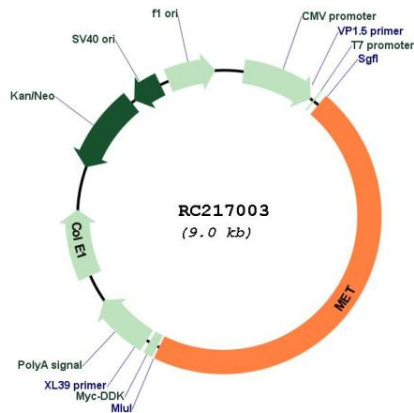
ACCN: NM_000245

ORF Size: 4170 bp

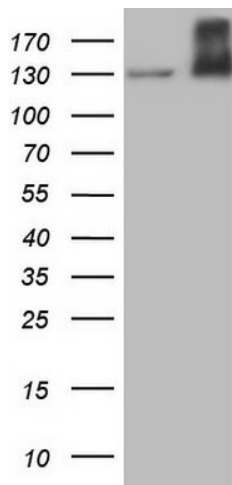
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_000245.4
RefSeq Size:	6641 bp
RefSeq ORF:	4173 bp
Locus ID:	4233
UniProt ID:	P08581
Cytogenetics:	7q31.2
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane
Protein Pathways:	Adherens junction, Axon guidance, Colorectal cancer, Cytokine-cytokine receptor interaction, Endocytosis, Epithelial cell signaling in Helicobacter pylori infection, Focal adhesion, Melanoma, Pathways in cancer, Renal cell carcinoma
MW:	155.54 kDa

Gene Summary:

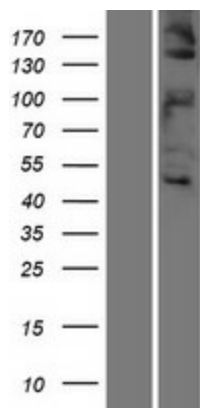
This gene encodes a member of the receptor tyrosine kinase family of proteins and the product of the proto-oncogene MET. The encoded preproprotein is proteolytically processed to generate alpha and beta subunits that are linked via disulfide bonds to form the mature receptor. Further processing of the beta subunit results in the formation of the M10 peptide, which has been shown to reduce lung fibrosis. Binding of its ligand, hepatocyte growth factor, induces dimerization and activation of the receptor, which plays a role in cellular survival, embryogenesis, and cellular migration and invasion. Mutations in this gene are associated with papillary renal cell carcinoma, hepatocellular carcinoma, and various head and neck cancers. Amplification and overexpression of this gene are also associated with multiple human cancers. [provided by RefSeq, May 2016]

Product images:


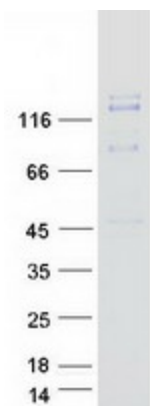
Circular map for RC217003



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MET (Cat# RC217003, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MET (Cat# [TA805795]). Positive lysates [LY400094] (100ug) and [LC400094] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400094]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217003 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MET protein (Cat# [TP317003]). The protein was produced from HEK293T cells transfected with MET cDNA clone (Cat# RC217003) using MegaTran 2.0 (Cat# [TT210002]).