

## Product datasheet for MR231465

### MIIt10 (NM\_001252561) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MIIt10 (NM\_001252561) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** MIIt10  
**Synonyms:** Af10; B130021D15Rik; D630001B22Rik; mKIAA4140  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >MR231465 representing NM\_001252561  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGAAGAGATGTGAGCTGTGTCCCATAAAGATGGAGCTTTAAAAAGAACAGATAATGGGGTTGGGCTC  
 ATGTGGTTTGTGCCCTCTATATCCAGAGGTACAATTTGCCAATGTTTCTACAATGGAGCCAATCGTTTT  
 ACAGTCTGTCCACATGATCGTTATAATAAGACTTGTATATATGTGATGAACAAGGACGAGAAAGCAAA  
 GCAGCCACTGGTCTTGCATGACATGTAATAAACATGGATGTCGACAGGCTTCCATGTAACATGTGCTC  
 AGTTTGCCGGGCTGCTTTGTGAAGAAGAAGGAATGGCGCAGACAATGTTCAACTGTGGCTACTGTAA  
 ATACCACTTTAGTAAGCTGAAAAAGAGCAAACGGGGATCTAATAGGTCATATGAGCAAAGTTAAGTGAC  
 TCTTCTCTCACTCTCAGGATAAGCATCATGAGAAAGAGAAAAAATAAAGAAAAAGGACAAACACA  
 AACAAAAACACAAGAAGCAACCAGAACCGTCACCTGCCTTGGTTCCTTCTTTGACTGTTACTACAGAAA  
 AACTTATACAAGCACTAGCAACAACCTCCATATCTGGATCATTGAAGCGCTTGAAGATACTGCAGCAAGA  
 TTTACAAATGCAAATTTCCAGGAAGTCTCTGCCATACCTCTAGTGAAAAAGATGTTTCAGAGGCTAGAG  
 GGTGAGAGGGCAAAGGGAAGAAATCTTCAGCTCACAGCTCAGGTCAAAGGGGAAGGAAGCTGGTGCAGG  
 AAGAAATCCAGGAACAGCTGTGTCAGCATCTAGCCCTTTCCACAAGGCAGTTTTTCAGGAACCTCAGGC  
 AGTGTAAGTCATCTTCTGGAAGTTCAGTGCAGTCTCCCGAGACTTCTTAAGCTTTACAGACTCAGATC  
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 AAGCCAGGAAGCGGCAGTAAACAGTTTTAGCTCTTTAGTGGTACCCTGTGACCTCGACTGTTATTTCA  
 CAGCCTAAAAGCTTTGACAATTCACCTGGAGAGTTGGGTAGTTCGAGCCTCCCTACAGCAGGATATAAGC  
 GGGCTCAGACTTCTGGTATAGAAGAAGAAGCTGTAAGGAAAAAGAAACGAAAAGGAAATAAGCAAAGCAA  
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 TCACCAACATCGTCCGTAGCATCAGCTGCAGGAAGTGAACAAGCTCTAGTCTTCAGAAATCTCCTACGC  
 TGCTCAGGAATGGAAGTTTGAGAGTCTTAGTGTGGCTCGTCTCCAGTTGGCTCAGAAATTTCCATGCA  
 GTATCGACATGATGGAGCTTGCCAACAACCTTCTCAGAGTTGCTGAATGCAATACACAATGGTATT  
 TATAACAGCAATGATGTAGCCGTATCCTTTCCAACGTGGTGTCTGGCTCAGGATCTAGTACTCCTGTCT



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CTAGCTCTCATATACCTCAGCAGTCATCTGGTCATTTGCAACAGGTGGGAGCTCTCTCCCCCTCAGCTGC  
 GTCATCTGTAACCCCTGCTGCTGCTACAACCTCAGGCAAATACCGTTTCTGGATCTTCTCTCAGTCAGGCA  
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 GAACAGCATCAGGCCTTCTATACCAGCTGATGCAGCAGCAGCACCACCCGCTGAGCTCCAGCAGCTGC  
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR231465 representing NM\_001252561  
 Red=Cloning site Green=Tags(s)

MKRCELCPHKDGALKRDTNNGWAHVVCALYIPEVQFANVSTMEPIVLQSVPHDRYNTCYICDEQGRESK  
 AATGACMTCNKHGCRQAFHVTCAQFAGLLCEEENGDADNVQYCYCKYHFSLKLSKRGSNRSYEQSLSD  
 SSSHSQDKHHEKEKKYKEKDKHKQKHKKQPEPSPALVPSLTVTTEKTYTSTSNNSISGSLKRLEDTAAR  
 FTNANFQEVSAHTSSGKDVSEARGSEGKGSASHSSGQRGRKPGAGRNPGTAVSASSPFPQGSFSGTPG  
 SVKSSSGSSVQSPQDFLSFTDSDLRSDSYHTTQQPSSTKDVHKGESGSQEAAVNSFSSLVGHVPTSTVIS  
 QPKSFDNSPGLGSSSLPTAGYKRAQTSGIEEEAVKEKKRKGKQSKHGPGRPKGNKNQENVSHLSVSSA  
 SPTSSVASAAGSVTSSSLQKSPDLLRNGSLQSLVSGSSPVGSEISMQRHDGACPTTTTSELLNAIHNGI  
 YNSNDVAVSFPNVVSGSGSSTPVSSSHIPQSSGHLQQVGALSPSAASSVTPAAATTQANTVSGSSLQA  
 PAHMYGSRLNQPSMAVLIQAQESSQTDQDLGDNARSLGGRGSSPRGSLSPRSPVSNLQLRYDQPSNSSL  
 ETVPPVAASIEQLLERQWSEGGQFLLEQGTGPDILGMLKSLHQLQVENRRLEEQIKNLAKKERLQLLNA  
 QLSVFPFAITTNPSPSHQMHTYTATAPPDLSNSSKSPHIGNSFLPDNSLPVLNQDLTSSGQSTSSSSA  
 LSTPPPAGQSPAQQSSGVSQVNGVTVGALASGMQTVTSTIPAVSAVGGIIGALPGNQLAINGIVGAL  
 NGVIQTPVTISQNPAPLTHTSVPPNAAHMPAAALTNSASGLGLLSDQQRQMFQQQQFQQLLNSQQLTP  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

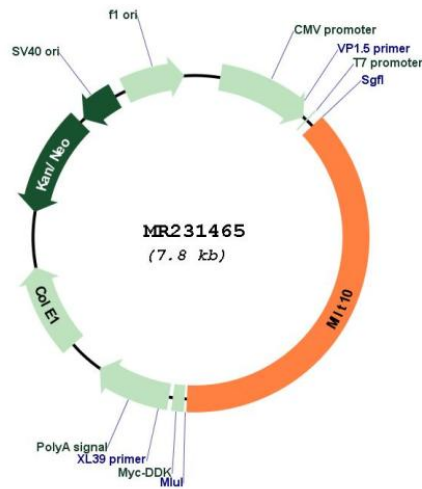
**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001252561  
 ORF Size: 2970 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001252561.1</a> , <a href="#">NP_001239490.1</a>
<b>RefSeq Size:</b>	5116 bp
<b>RefSeq ORF:</b>	2973 bp
<b>Locus ID:</b>	17354
<b>Cytogenetics:</b>	2 A3
<b>MW:</b>	105 kDa
<b>Gene Summary:</b>	Probably involved in transcriptional regulation. Binds to cruciform DNA (By similarity). In cells, binding to unmodified histone H3 regulates DOT1L functions including histone H3 'Lys-79' dimethylation (H3K79me2) and gene activation (By similarity).[UniProtKB/Swiss-Prot Function]