

Product datasheet for MR211575

MIIt10 (NM_010804) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MIIt10 (NM_010804) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MIIt10
Synonyms:	Af10; B130021D15Rik; D630001B22Rik; mKIAA4140
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR211575 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTCTCTAGCGACCGGCCGTGCTCACTGGAGGACGAGGTCTCCCATAGTATGAAGGAAATGATTGGAG
GCTGTTGCGTTTGGCTCAGACGAGAGAGGCTGGGCCGAGAACCCTGGTTTATTGCGACGGGCACGGCTG
CAGCGTCGCGGTGCATCAAGCTTGCTATGGCATTGTTCAAGTACCTACTGGACCGTGGTTTTGTAGGAAA
TGTGAATCTCAGGAGAGAGCAGCCAGAGTGAGATGTGAGCTGTGTCCCATAAAGATGGAGCTTTAAAAA
GAACAGATAATGGGGTTGGGCTCATGTGGTTTGTGCCCTCTATATTCCAGAGGTACAATTTGCCAATGT
TTCTACAATGGAGCCAATCGTTTTACAGTCTGTCCACATGATCGTTATAATAAGACTTGCTATATATGT
GATGAACAAGGACGAGAAAGCAAAGCAGCCACTGGTGCTTGCATGACATGTAATAAACATGGATGTCGAC
AGGCTTTCCATGTAACATGTGCTCAGTTTGTGGGCTGCTTTGTGAAGAAGAAGGGAATGGCGCAGACAA
TGTTCAACTACTGTGGCTACTGTAATACCACTTTAGTAAGCTGAAAAAGAGCAAACGGGGATCTAATAGG
TCATATGAGCAAAGTTTAAAGTACTCTTCTCTCACTCTCAGGATAAGCATCATGAGAAAGAGAAAAAAA
AATATAAAGAAAAGGACAAACACAAACAAAAACACAAGAAGCAACCAGAACCGTCACCTGCCTTGGTTCC
TTCTTTGACTGTTACTACAGAAAAAACTTATAACAAGCACTAGCAACAACCTCATATCTGGATCATTGAAG
CGTTTGAAGATACTGCAGCAAGATTTACAAATGCAAATTTCCAGGAAGTCTCTGCCCATACCTCTAGTG
GAAAAGATGTTTCAGAGGCTAGAGGGTCAGAGGGCAAAGGGAAGAAATCTTCAGCTCACAGCTCAGGTCA
AAGGGGAAGGAAGCCTGGTGCAGGAAGAAATCCAGGAACAGCTGTGTCAGCATCTAGCCCTTTCCACAA
GGCAGTTTTTCAGGAACTCCAGGCAGTGTAAAGTCATCTTCTGGAAGTTCAGTGCAGTCTCCCCAGGACT
TCTTAAGCTTTACAGACTCAGATCTGCGAAGTGACAGTTACACTCACACCCAGCAGCCATCATCAACCAA
AGATGTACATAAAGGAGAGTCTGGAAGCCAGGAAGCGGCAGTAAACAGTTTTAGCTCTTTAGTTGGTCAC
CCTGTGACCTCGACTGTTATTTACAGCCTAAAAGCTTTGACAATTCACCTGGAGAGTTGGGTAGTTCGA
GCCTCCCTACAGCAGGATATAAGCGGGCTCAGACTTCTGGTATAGAAGAAGAAGCTGTAAGGAAAAAGAA
ACGAAAAGGAAATAAGCAAAGCAAACATGGCCCCGGCCGACCCAAAGGAAACAAAAATCAAGAAAATGTT



[View online »](#)

TCTCACCTCTCAGTTTCTTGCTTACCAACATCGTCCGTAGCATCAGCTGCAGGAAGTGAACAAGCT
 CTAGTCTTCAGAAATCTCCTACGCTGCTCAGGAATGGAAGTTGCAGAGTCTTAGTGTGGCTCGTCTCC
 AGTTGGCTCAGAAATTTCCATGCAGTATCGACATGATGGAGCTTGTCCAACAACCTACCTTCTCAGAGTTG
 CTGAATGCAATACACAATGGTATTTATAACAGCAATGATGTAGCCGTATCCTTTCCAAACGTGGTGTCTG
 GCTCAGGATCTAGTACTCCTGTCTTAGCTCTCATATACCTCAGCAGTCATCTGGTCATTTGCAACAGGT
 GGGAGCTCTCTCCCCCTCAGTGCCTCATCTGTAACCCCTGCTGCTGCTACAACCTCAGGCAATACCGTT
 TCTGGATCTTCTCAGTCAGGCAGCACCCATATGATGCGAGTAGATTAATCAGAATCCATCCATGG
 CAGTTCTCATAGCTCAGTCTGAAAGCAGCCAAACAGATCAAGATCTTGGAGACAATGCCCGTAGCCTGGG
 TGGCCGAGGAAGCTCGCCCCGAGGAAGCCTCTCTCCGAGATCCCCGTGAGCAACTTACAGCTTCGCTAT
 GATCAACCGAGCAATAGCAGTTTGGAACTGTGCCTCCAGTAGCAGCAAGTATTGAACAGCTCTTGGAGA
 GGCAGTGGAGTGAAGGACAGCAGTTTTTACTAGAGCAGGGGACTCCTGGTGACATTCTAGGAATGTTAAA
 GTCATTACATCAACTTCAAGTTGAAAATCGAAGATTAGAAGAACAGATCAAAAATTTGACTGCCAAGAAA
 GAACGTCTTCAGTTGTTGAATGCACAGCTTTCAGTGCCTTCCAGCCATAACGACAAACCCAGTCCGT
 CCCATCAGATGCACACATACACAGCACAGACTGCTCCTCCTGATTCCCTGAACAGCAGTAAGAGCCC
 ACATATAGGAAACAGCTTTTACCTGACAATTCTTCTCCTGTATTAATCAGGACTTGACCTCCAGTGG
 CAAAGCACCAGCAGTTCTTCTGCTCTTCTACTCCCCCTCCTGCTGGCCAGAGTCCCTGCTCAGCAGAGCT
 CTGGAGTCAGTGGGGTTCAGCAGGTGAATGGCGTGACAGTGGGGGCACTAGCTAGTGGGATGCAGACCGT
 CACATCCACCATCCCAGCTGTGTCCGAGTGGGTGGAATAATTGGAGCTCTGCCAGGTAACCAACTGGCA
 ATTAACGGCATTGTGGGAGCTTTAAATGGTGTGATTGAGACTCCAGTCACAATCTCCAGAACCCTGCC
 CTCTCACCCACACCAGTGTACCACCTAATGCAGCGCATCCAATGCCGGCCGCCGACTGACCAACAGTGC
 CTCGGGACTAGGGCTGCTGTCGGACCAGCAGAGACAGATGTTTATCCAGCAGCAGAGTTCCAGCAGCTG
 TTAACCTCCAGCAGCTCACACCCGAACAGCATCAGGCCTTCTATACCAGCTGATGCAGCAGCAGCACC
 ACCCGCTGAGCTCCAGCAGCTGCAGCTCCCGGACCCACGCAGATCCCCATCAACAATCTCTTGCAGG
 TGCTCAGGCGCCTCCACTCCACACAGCTACCACCAACCCCTTCTCACCATCCACGGGACAGCAGCAGC
 CAGAAGGTCACAAGACTTAGTGATAAAACTGGGCCTGTAGCTCAAGAGAAAAGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR211575 protein sequence
 Red=Cloning site Green=Tags(s)

MVSSDRPVSLEDEVSHSMKEMIGGCCVCSDERGWAENPLVYCDGHGCSVAVHQACYGIVQVPTGPWF
 CRKCESQERAAVRCELCPHKDGLKRTDNGGWAHVVCALYIPEVQFANVSTMEPIVLQSVPHDRYNKTCYIC
 DEQGRESKAATGACMTCNKHGCRQAFHVTCQFAGLLCEEEGNGADNVQYCYCKYHFSKLLKSKRGSNR
 SYEQSLSDSSSHSQDKHHEKEKKYKEKDKHKQKHKKQPEPSPALVPSLTVTTEKTYTSTSNNSISGSLK
 RLEDTAARFTNANFQEVSAHTSSGKDVSEARGSEGKGGKSSAHSSGQRGRKPGAGRNPPTAVSASSFPQ
 GSFSGTPGSVKSSSGSSVQSPQDFLSFTDSDLRSDSYHTHTQPPSSTKDVHKGESGSQEAAVNSFSSLVGH
 PVTSTVISQPKSFDNSPGLGSSSLPTAGYKRAQTSGIEEEAVKEKRRKGNKQSKHGPGRPKGNKQENV
 SHLSVSSASPTSSVASAAGSVTSSSLQKSPDLLRNGSLQSLSVGSSPVGSEISMQRHGDGACPTTTFSEL
 LNAIHNGIYNSNDVAVSFPNVVSGSGSSTPVSSSHIPQQSSGHLQQVQALSPSAASSVTPAAATTQANTV
 SGSSLQAPAHMYGSRLNQNPSMAVLIQSESSQTDQDLGDNARSLGGRGSSPRGSLSPRSPVSNLQRLY
 DQPSNSSLETVPPVAASIEQLLERQWSEGQFLLEQGTGPDILGMLKSLHQLQVENRRLLEEIQKNTAKK
 ERLQLLNAQLSVPFPAITTNPSPSHQMHTYTAQTAPPDLSNSSKSPHIGNSFLPDNSLPVLNQDLTSSG
 QSTSSSSALSTPPPAGQSPAQQSSGVQVNGVTVGALASGMQTVTSTIPAVSAVGGIIGALPGNQLA
 INGIVGALNGVIQTPVTISQNPAPLTHTSVPPNAAHPMPAAALTNSASGLGLLSDQQRQMF IQQQFQQL
 LNSQQLTPEQHQAFLYQLMQQHHPELQQLQLPGPTQIPINNLLAGAQAAPLHTATTNPFLTIIHGDSTS
 QKVTRLSDKTGPVAQEK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_010804

ORF Size: 3207 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:

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.

RefSeq: [NM_010804.2](#)

RefSeq Size: 4940 bp

RefSeq ORF: 3207 bp

Locus ID: 17354

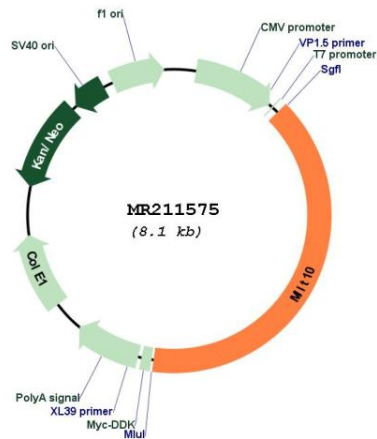
UniProt ID: [O54826](#)

Cytogenetics: 2 A3

MW: 113 kDa

Gene Summary: 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]

Product images:



Circular map for MR211575