

Product datasheet for **MG223703**

Cnot2 (NM_028082) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cnot2 (NM_028082) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cnot2
Synonyms:	2600016M12Rik; 2810470K03Rik; AA537049; AA959607; AW557563; C79650
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG223703 representing NM_028082
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTGAGGACTGATGGACATACATTATCTGAGAAAAGAACTACCAGATGCTGGCATCGCCATCTACGT
 CAGGTCAGCTGTCTCAATTTGGGGCAAGTTTATACGGGCAACAAAGTGCCTAGGCTTCCAATGAGGGG
 GATGAGCAACAATACCCCTCAGTTAAATCGCAGCTTATACAAGCACTCAGTTACCGAGCCACGTCACG
 CCAACAACAGGGGTACCAACAATGTCACCTCACACGCCTCCATCTCCAAGCAGGGGTATTTTGCCTATGA
 ATCCTAGGAATATGATGAACCACTCCCAGGTTGGTCAGGGCATTGTAATTCCTAGCAGGACAAATAGCAT
 GAGCAGTTCAGGGTTAGGTAGCCCCAACAGAAGCTCGCCAAGCATAATATGTATGCCAAAGCAACAGCCT
 TCTCGACAGCCTTTTACTGTGAACAGTATGTCTGGATTTGGAATGAACAGGAATCAGGCATTTGGAATGA
 ATAACTCCTTATCAAGTAACATTTTAAATGGAACAGATGGCAGTAAAAATGTGACAGGATTGGACCTTTC
 AGATTTCCAGCGTTAGCTGACCGGAATAGAAGGGAAGGGAGCGGCAACCCAACCTCATTATAAATCCCC
 TTGGCTGGAAGAGCTCCTTACGTTGGAATGGTAACAAAACCTGCAATGAGCAATCCAAGACTTCTCAA
 TACACAACGAAGATTTTCCAGCATTACCTGGTTCCAGCTATAAAGATCCAACGTCAAGTAATGACGACAG
 CAAATCTAATTTGAGTACATCGGGGAAGACGACTTCAAGTACAGATGGACCCAAATTCCTGGAGATAAA
 AGTTCAACAACACAAAACAATAATCAACAGAAAAGGGGATCCAGGTGTTACCTGATGGTCGAGTTACTA
 ACATTCCTCAAGGGATGGTGACGGACCAATTTGGAATGATTGGCCTGTTAACATTTATCAGGGCAGCAGA
 GACAGACCCAGGAATGGTACATCTTGTCTTAGGAAGTACTTAAACATTAGGCCTCAATCTGAACTCA
 CCTGAAAATCTCTATCCCAAATTTGCATCACCTGGGCTTCTTACCTTGTGCGCCTCAAGACATAGACT
 TCCATGTTCCATCAGAATATTTAAACAACATTACATTAGGGATAAGCTGGCTGCAACTCAAACCTGGCCG
 ATATGGAGAAGACTCCTCTTCTATCTGTATTACATGAACGGCGGGGATGTATTACAACCTTAGCTGCG
 GTAGAACTTTTTAACCGTGATTGGAGATACCACAAGGAGGAGCGGGTATGGATTACCAGGGCACCAGGCA
 TGGAGCCAACAATGAAAACCAACACGTATGAGCGGGGACCTACTATTTCTTTGACTGTCTCAACTGGAG
 GAAAGTAGCTAAGGAGTTCATCTGGAATATGACAAATAGAAGAGCGGCCTCACCTGCCATCCACCTTC
 AACTACAACCCTGCTCAGCAAGCCTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG223703 representing NM_028082
 Red=Cloning site Green=Tags(s)

MVRTDGHTLSEKRNQMLASPSTSGQLSQFGASLYGQQSALGLPMRGMNNTPQLNRSLSQGTQLPSHVT
 PTTGVPTMSLHTPPSPSRGILPMNPRNMMNHSQVGGQIVIPSRTNSMSSSGLGSPNRSSPSIICMPKQQP
 SRQPFVNSMSGFGMNRNQAFGMNNSLSSNIFNGTDGSENVTLGLDLSDFPALADNRNREGSGNPTPLINP
 LAGRAPYVGMVTKPANEQSQDFSIHNEFPALPGSSYKDPTSSNDDSKSNLSTSGKTTSSTDGPKFPDGD
 SSTTQNNNQKKGIVLQVLPDGRVTNIPQGMVTDQFGMIGLLTFIRAAETDPGMVHLALGSDLTTLGLNLNS
 PENLYPKFASPWASSPCRQDIDFHVPSSEYLNIHIRDKLAAIKLGRYGEDLLFYLYMNGGDVLLQLLAA
 VELFNRDWRVYHKEERVWITRAPGMEPTMKTNTYERGTYYFFDCLNWRKVAKEFHLEYDKLEERPHLPSTF
 NYNPAQQAF

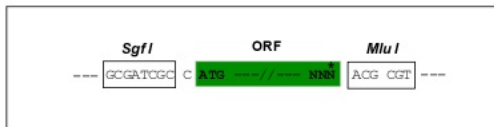
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

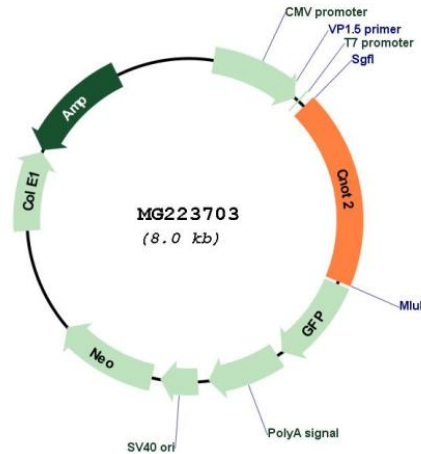
Cloning Scheme:

Cloning sites used for ORF Shutting:



	EcoRI	BamHI KpnI	RBS	Kozac Consensus	SgfI	AscI
				--- ATG ---		
CTATAGGGCGGCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGGCCAGATCT						
HindIII	NheI	RsrII	MluI	NotI	XhoI	GFP Tag
CAAGCTTAACTAGCTAGCGGACCG	ACG CGT	ACG CGG CCG	CTC GAG	ATG GAG AGC GAC	---	---
	T R T R P L E			M E S D	- - -	- - -
PmeI	FseI					
---	GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT					
- - -	E E R V Stop					

Plasmid Map:



ACCN: NM_028082

ORF Size: 1497 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_028082.2](#), [NP_082358.2](#)

RefSeq Size: 2693 bp

RefSeq ORF: 1500 bp

Locus ID: 72068

UniProt ID: [Q8C5L3](#)

Cytogenetics: 10 D2

Gene Summary: Component of the CCR4-NOT complex which is one of the major cellular mRNA deadenylases and is linked to various cellular processes including bulk mRNA degradation, miRNA-mediated repression, translational repression during translational initiation and general transcription regulation. Additional complex functions may be a consequence of its influence on mRNA expression. Required for the CCR4-NOT complex structural integrity. Can repress transcription and may link the CCR4-NOT complex to transcriptional regulation; the repressive function may specifically involve the N-Cor repressor complex containing HDAC3, NCOR1 and NCOR2. Involved in the maintenance of embryonic stem (ES) cell identity; prevents their differentiation towards extraembryonic trophectoderm lineages. [UniProtKB/Swiss-Prot Function]