

## Product datasheet for **MG223551**

### Canx (NM\_007597) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Canx (NM_007597) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Canx
Synonyms:	1110069N15Rik; AI988026; Cnx; D11Erttd153e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG223551 representing NM\_007597  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAAGGAAGTGGTTACTGTGTTGCTGCTGGTCTTGAAGTGCAGCTGTTGAGGCTCATGATGGAC  
 ATGATGATGACGCGATTGATATTGAAGATGATCTTGATGATGTTATTGAAGAGGTAGAAGATTCAAATC  
 TAAATCAGATGCCAGCACTCCTCCATCTCCAAAGTCCACACAAAGCTCCAGTTCCAACAGGGGAGGTT  
 TATTTTGTGACTCCTTTGACAGAGGCTCTGTGAGGGTGGATTTTATCTAAAGCCAAAAAAGATGACA  
 CTGATGATGAAATTGCCAAATATGATGGAAAGTGGGAAGTAGATGAGATGAAGGAAACAAAGCTTCCAGG  
 GGATAAAGGACTTGTACTGATGTCTCGGGCCAAGCATCATGCCATCTCTGCTAACTGAATAAGCCCTTC  
 CTGTTTGATACCAAGCCTCTCATTGTTCCAGTATGAGGTTAATTTTCAGAATGGAATAGAATGTGGTGGT  
 CCTATGTGAAGCTGCTTCCAAGACGGCAGAGCTCAGCCTGGATCAATCCACGACAAGACTCCCTATAC  
 TATTATGTTTGGTCCAGATAAGTGTGGAGAGGACTACAACTGCATTTTCATCTTTTCGACACAAAAATCCC  
 AAGACAGGTGTATATGAAGAAAAACATGCTAAGAGGCCAGATGCAGATCTGAAGACCTATTTCACTGACA  
 AGAAAAACGCATCTTTATACATTAATCTTGAATCCAGACAATAGTTTTGAAATATTAGTTGACCAGTCTGT  
 TGTGAACAGTGGAAATCTGCTAAATGACATGACTCCTCTGTAAACCTTCACGTGAAATTGAAGACCCA  
 GAAGACCGGAAGCCTGAAGATTGGGATGAAAGGCCAAAAATAGCAGATCCAGATGCTGTCAAGCCAGATG  
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 CGAACCTGAGTATATCCAGACCCTGATGCAGAGAAGCCAGAGGATTGGGATGAGGATATGGACGGAGAA  
 TGGGAGGCTCCTCAGATTGCCAACCCCAAGTGTGAGTCAAGCCCTGAGGATGATGATGATGATGATGAT  
 TGATTGACAACCCCAATTATAAGGGCAAATGGAAGCCTCCAATGATTGACAACCCCAACTACCAGGGAAT  
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 AGTGCTATTGGTTGGAGCTCTGGTCCATGACATCCGACATCTTTTTTGACAACCTTATCATTAGTGGTG  
 ACCGAAGAGTAGTTGATGATTGGGCAATGATGGGTGGGGCTGAAGAAAGCTGCTGATGGGGCTGCTGA  
 GCCAGGTGATGCTGCAGATGCTGGAGGCAGCTGAAGAGCGTCCATGGCTTTGGGTGGTCTACATTTTG  
 ACTGTAGCTTTGCCAGTGTCTCTGTGATCCTCTTCTGCTGTTCTGAAAAGAAACAGTCCAATGCTATGG  
 AGTACAAGAAGACGGATGCTCCCCAGCCAGATGTGAAGGATGAAGAAGGGAAGGAAGAAGAAGAACAA  
 GAGGGATGAAGAGGAAGAAGAGGAGAAGCTTGAAGAGAAAACAGAAGATGATGCTGAAGAAGATGGTGT  
 ACTGGCAGTCAAGATGAGGAAGTAGCAAGCCTAAAGCAGAGGAGGATGAAATTTTGAACAGATCGCCAA  
 GAAACAGAAAGCCACGAAGAGAG

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG223551 representing NM\_007597  
 Red=Cloning site Green=Tags(s)

MEGWLLCLLLVLGTAAVEAHDGHDDDAIDIEDDLDDVIEEVEDSKSKSDASTPPSPKVITYKAPVPTGEV  
 YFADSFDRGSLSGWILSKAKKDDTDEIAKYDGKWEVDEMKETKLPDGKGLVLMRAKHHAISAKLNKPF  
 LFDTKPLIVQYEVNFQNGIECGGAYVKLLSKTAE LSLDQFHDKTPYTIMFGPDKCGEDYKLFIFRHKNP  
 KTGVEEYKHKRPPADLKYFTDKKTHLYTLILNPDNSFEILVDQSVVNSGNLLNDMTPPVNPSREIEDP  
 EDRKPEDWDERPKIADPDAVKPDDWEDAPSKIPDEEATKPEGWLDDEPEYIPDPDAEKPEDWDEDMGE  
 WEAPQIANPKCESAPGCGVWQRP MIDNPNYKWKWPPMIDNPNYQGIWKPRKIPNPDFFEDLEPFKMPF  
 SAIGLELWSMTSDIFFDNFIISGDRRVVDDWANDGWGLKKAADGAAEPGVVLQMLEAAEERPWLVVYIIL  
 TVALPVFLVILFCCSGKKQSNAMAYKKTDPQDPVKDEEGKEEKNKRDEEEEEKLEEKQKSDAEEDGV  
 TGSQDEEDSKPKAEDEILNRSRNRKPRRE

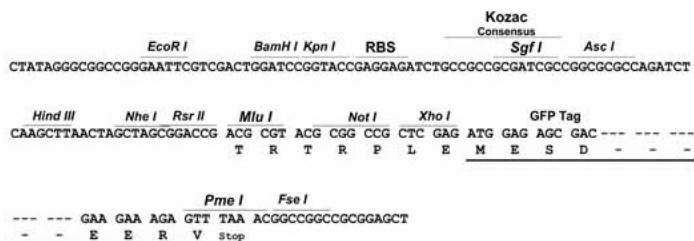
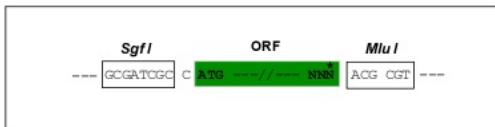
**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

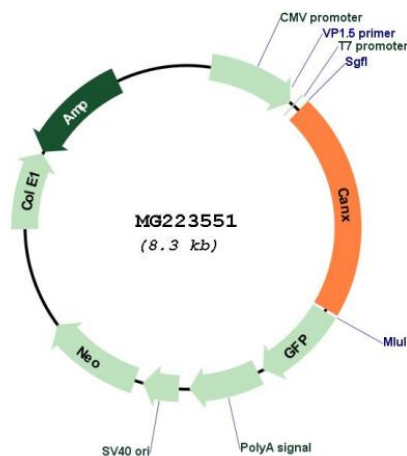
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_007597  
 ORF Size: 1773 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>Components:</b>	<p>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).</p>
<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>	<p><a href="#">NM_007597.3</a>, <a href="#">NP_031623.1</a></p>
<b>RefSeq Size:</b>	<p>4292 bp</p>
<b>RefSeq ORF:</b>	<p>1776 bp</p>
<b>Locus ID:</b>	<p>12330</p>
<b>UniProt ID:</b>	<p><a href="#">P35564</a></p>
<b>Cytogenetics:</b>	<p>11 30.46 cM</p>
<b>Gene Summary:</b>	<p>Calcium-binding protein that interacts with newly synthesized glycoproteins in the endoplasmic reticulum. It may act in assisting protein assembly and/or in the retention within the ER of unassembled protein subunits. It seems to play a major role in the quality control apparatus of the ER by the retention of incorrectly folded proteins. Associated with partial T-cell antigen receptor complexes that escape the ER of immature thymocytes, it may function as a signaling complex regulating thymocyte maturation. Additionally it may play a role in receptor-mediated endocytosis at the synapse.[UniProtKB/Swiss-Prot Function]</p>