

## Product datasheet for **RG200229**

### Calnexin (CANX) (NM\_001746) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Calnexin (CANX) (NM_001746) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Calnexin
Synonyms:	CNX; IP90; P90
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG200229 representing NM\_001746  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGAAGGAAGTGGTTGCTGTGTATGTTACTGGTCTTGAAGTCTATTGTTGAGGCTCATGATGGAC  
 ATGATGATGATGTGATTGATATTGAGGATGACCTTGACGATGTCATTGAAGAGGTAGAAGACTCAAACC  
 AGATACCACTGCTCCTCCTTCATCTCCCAAGGTTACTTACAAAGCTCCAGTTCACAGGGGAAGTATAT  
 TTTGCTGATTCTTTGACAGAGGAACTCTGTCAGGGTGGATTTTATCCAAAGCCAAGAAAGACGATACCG  
 ATGATGAAATTGCCAAATATGATGGAAAGTGGGAGGTAGAGGAAATGAAGGAGTCAAAGCTTCCAGGTGA  
 TAAAGGACTTGTGTTGATGTCTCGGGCCAAGCATCATGCCATCTCTGCTAAACTGAACAAGCCCTTCTCTG  
 TTTGACACCAAGCCTCTCATTGTTTCAGTATGAGGTTAATTTCCAAATGGAATAGAATGTGGTGGTGCCT  
 ATGTGAAACTGCTTTCTAAAACACCAGAACTCAACCTGGATCAGTTCATGACAAGACCCCTTATACGAT  
 TATGTTTTGGTCCAGATAAATGTGGAGAGGACTATAAACTGCACCTCATCTCCGACACAAAAACCCAAA  
 ACGGGTATCTATGAAGAAAAACATGCTAAGAGGCCAGATGCAGATCTGAAGACCTATTTTACTGATAAGA  
 AAACACATCTTTACACACTAATCTTGAATCCAGATAATAGTTTTGAAACTACTGGTTGACCAATCTGTGGT  
 GAATAGTGAAATCTGCTCAATGACATGACTCCTCCTGTAATCCTTACAGTGAATTTGAGGACCCAGAA  
 GACCGGAAGCCCGAGGATTGGGATGAAAGACAAAAATCCAGATCCAGAAGCTGTCAAGCCAGATGACT  
 GGGATGAAGATGCCCTGCTAAGATTCCAGATGAAGAGGCCACAAAAACCCGAAGGCTGGTTAGATGATGA  
 GCCTGAGTACGTACCTGATCCAGACGCAGAGAAACCTGAGGATTGGGATGAAGACATGGATGGAGAATGG  
 GAGGCTCCTCAGATTGCCAACCTAGATGTGAGTCAGCTCCTGGATGTGGTGTCTGGCAGCGACCTGTGA  
 TTGACAACCCCAATTATAAAGGCAAATGGAAGCCTCCTATGATTGACAATCCAGTTACCAGGGAATCTG  
 GAAACCCAGGAAAAATACCAAATCCAGATTTCTTTGAAGATCTGGAACCTTTCAGAATGACTCCTTTTGT  
 GCTATTGGTTTGGAGCTGTGGTCCATGACCTCTGACATTTTTTTTTGACAACCTTATCATTGTGCTGATC  
 GAAGAATAGTTGATGATTGGGCAATGATGGATGGGGCCTGAAGAAAGCTGCTGATGGGGCTGCTGAGCC  
 AGGCGTTGTGGGCAGATGATCGAGGCAGCTGAAGAGCGCCCGTGGCTGTGGGTAGTCTATATTCTAACT  
 GTAGCCCTTCTGTGTTCTGTTATCCTCTTCTGCTGTTCTGGAAGAAAACAGACCAGTGGTATGGAGT  
 ATAAGAAAAGTATGCACCTCAACCGGATGTGAAGGAAGAGGAAGAAGAGAAGGAAGAGGAAAAGGACAA  
 GGGAGATGAGGAGGAGGAAGGAGAAGAGAACTGAAGAGAAAACAGAAAAGTATGCTGAAGAAGATGGT  
 GGCACGTGTCAGTCAAGAGGAGGAAGACAGAAAACCTAAAGCAGAGGAGGATGAAATTTTGAACAGATCAC  
 CAAGAAAACAGAAAGCCACGAAGAGAG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG200229 representing NM\_001746  
 Red=Cloning site Green=Tags(s)

MEGKWLMLLVLGTAIIVEAHDGHDDDDVIDIEDDLDDVIEEVEDSKPDTTAPPSSPKVITYKAPVPTGEVY  
 FADSFDRGTL SGWILSKAKKDDTDDEIAKYDGKWEVEEMKESKLPDGKGLVMSRAKHHAISAKLNKPFLL  
 FDTKPLIVQYEVNFQNGIECGGAYVKLLSKTPELNLDQFHDKTPYTIMFGPDKCGEDYKLFIFRHKNPK  
 TGIYEEKHAKRPDADLKYFTDKKTHLYLILNPDNSFEILVDQSVVNSGNLLNDMTPPVNSREIEDPE  
 DRKPEDWDERPKIPDPEAVKPDDWDEDAPAKIPDEEATKPEGWLDDEPEYVDPDAEKPEDWDEDMDGEW  
 EAPQIANPRCESAPGCGVWQRPVIDNPNYKGWKPPMIDNPSYQGIWKPRKIPNPDFFEDLEPFRMTPFS  
 AIGLELWSMTSDIFFDNFIICADRRIVDDWANDGWGLKKAADGAAEPGVVGMIEAAERPWLWVYVILT  
 VALPVFLVILFCCSGKKQTSMEYKKTDPQPDVKEEEEEKEEEKDKGDEEEEGEEKLEEKQKSDAEDGD  
 GTVSEQEEEDRKPKAEDEILNRSRNRKPRRE

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001746

**ORF Size:** 1776 bp

**OTI Disclaimer:** 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 [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

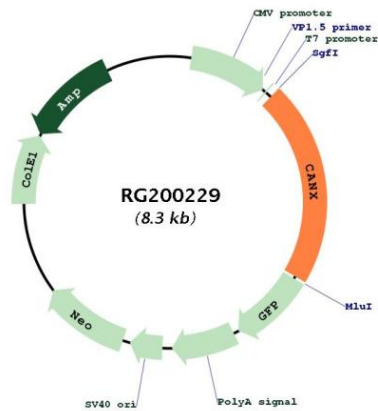
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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:	<a href="#">NM_001746.4</a>
RefSeq Size:	4953 bp
RefSeq ORF:	1779 bp
Locus ID:	821
UniProt ID:	<a href="#">P27824</a>
Cytogenetics:	5q35.3
Domains:	calreticulin
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Antigen processing and presentation
Gene Summary:	This gene encodes a member of the calnexin family of molecular chaperones. The encoded protein is a calcium-binding, endoplasmic reticulum (ER)-associated protein that interacts transiently with newly synthesized N-linked glycoproteins, facilitating protein folding and assembly. It may also play a central role in the quality control of protein folding by retaining incorrectly folded protein subunits within the ER for degradation. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jun 2018]

### Product images:



Circular map for RG200229