

Product datasheet for **RG203740**

Calnexin (CANX) (NM_001024649) Human Tagged ORF Clone

Product data:

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



ORF Nucleotide Sequence: >RG203740 representing NM_001024649
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAAGGGAAGTGGTCTGTGTATGTTACTGGTCTTGGAACTGCTATTGTTGAGGCTCATGATGGAC
 ATGATGATGATGTGATTGATATTGAGGATGACCTTGACGATGTCATTGAAGAGGTAGAAGACTCAAAACC
 AGATACCACTGCTCCTCCTTCACTCTCCCAAGTTACTTACAAAGCTCCAGTTCCAACAGGGGAAGTATAT
 TTTGCTGATTCTTTTGACAGAGGAAGTCTGTGAGGTGGATTTTATCCAAGCCAAGAAAGACGATACCG
 ATGATGAAATTGCCAAATATGATGGAAGTGGGAGGTAGAGGAAATGAAGGAGTCAAAAGCTTCCAGGTGA
 TAAAGGACTTGTGTTGATGTCTCGGGCCAAGCATCATGCCATCTCTGCTAAACTGAACAAGCCCTTCTCTG
 TTTGACACCAAGCCTCTCATTGTTCAAGTATGAGGTTAATTTCCAAATGGAATAGAATGTGGTGGTGCCT
 ATGTGAACTGCTTTCTAAACACCAGAACTCAACCTGGATCAGTTCATGACAAGACCCCTTATACGAT
 TATGTTTGGTCCAGATAAATGTGGAGAGGACTATAAAGTCACTTCTCTCCGACACAAAAACCCCAAA
 ACGGGTATCTATGAAGAAAAACATGCTAAGAGGCCAGATGCAGATCTGAAGACCTATTTTACTGATAAGA
 AAACACATCTTTACACACTAATCTTGAATCCAGATAATAGTTTTGAAATACTGGTTGACCAATCTGTGGT
 GAATAGTGGAAATCTGCTCAATGACATGACTCCTCCTGTAATCCTTCAAGTGAATGAGGACCCAGAA
 GACCGGAAGCCCGAGGATTGGGATGAAAGACCAAAATCCAGATCCAGAAGCTGTCAAGCCAGATGACT
 GGGATGAAGATGCCCTGCTAAGATTCCAGATGAAGAGGCCACAAAACCCGAAGGCTGGTTAGATGATGA
 GCCTGAGTACGTACCTGATCCAGACGAGAGAAACCTGAGGATTGGGATGAAGACATGGATGGAGAAATGG
 GAGGCTCCTCAGATTGCCAACCTAGATGTGAGTCAGTCTGATGTGGTGTCTGGCAGCGACCTGTGA
 TTGACAACCCCAATTATAAAGGCAATGGAAGCCTCCTATGATTGACAATCCAGTTACCAGGGAATCTG
 GAAACCCAGGAAAAACCAATCCAGATTTCTTTGAAGATCTGGAACCTTTGAGAATGACTCCTTTTAGT
 GCTATTGTTTGGAGCTGTGGTCCATGACCTCTGACATTTTTTTTGACAACTTTATCATTGTGCTGATC
 GAAGAATAGTTGATGATTGGGCAATGATGGATGGGGCCTGAAGAAAGCTGCTGATGGGGCTGCTGAGCC
 AGGCGTTGTGGGCAGATGATCGAGCAGCTGAAGAGCGCCGCTGGCTGTGGGTAGTCTATATTCTAAGT
 GTAGCCCTTCTGTGTTCTGTGTTATCCTCTTCTGCTGTTCTGGAAGAAACAGACCAAGTGTATGGAGT
 ATAAGAAAAGTGTGCACCTCAACCGGATGTGAAGGAAGAGGAAGAGAAGGAAGGAAGGAAAAGGACAA
 GGGAGATGAGGAGGAGGAAGGAGAAGAACTTGAAGAGAAACAGAAAAGTGTGCTGAAGAAGATGGT
 GGCACGTGTCAGTCAAGAGGAGGAAGACAGAAAACCTAAAGCAGAGGAGGATGAAATTTTGACAGATCAC
 CAAGAAACAGAAAGCCACGAAGAGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG203740 representing NM_001024649
 Red=Cloning site Green=Tags(s)

MEGWLLCMLLVLTGTAIVEAHDGHDDVIDIEDLDVIEVEDSKPDTTAPPSSPKVITYKAPVPTGEVY
 FADSFDRGTL SGWILSKAKKDDTDEIAKYDGKWEVEEMKESKLPDGKGLVMSRAKHHAISAKLNKPF
 FDTKPLIVQYEVNFQNGIECGAYVKLLSKTPELNLDQFHDKTPYTIMFGPDKCGEDYKLHFI FRHKNPK
 TGIYEEKHAKRPDADLKTYFTDKKTHLYTLILNPDNSFEILVDQSVVNSGNLLNDMTPPVNPVSREIEDPE
 DRKPEDWDERPKIPDPEAVKPDDWDEDAPAKIPDEEATKPEGWLDEPEYVPDPAEKPEDWDEDMGEW
 EAPQIANPRCESAPGCGVWQRPVIDNPYKWKWPPMIDNPSYQGIWKPRKIPNPDFFEDLEPFRMTPFS
 ATGLELWSMTSDIFFDNFIICADRRIVDDWANDGWGLKKAADGAAEPGVVGQMI EAAEERPWLVVYIIL
 VALPVFLVILFCCSGKKQTSMEYKKTDAQPDPVKEEEEEEEEEKDKGDEEEEGEEKLEEKQKSDAEDG
 GTVSQEEEDRKPKAEDEILNRSRPNRKPREE

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001024649

ORF Size: 1776 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001024649.2](#)

RefSeq Size: 4900 bp

RefSeq ORF: 1779 bp

Locus ID: 821

UniProt ID: [P27824](#)

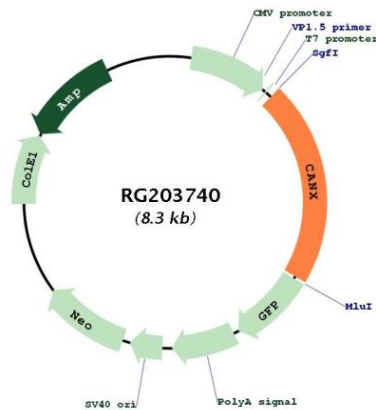
Cytogenetics: 5q35.3

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 RG203740