

Product datasheet for **RG210194**

NCKX2 (SLC24A2) (NM_020344) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NCKX2 (SLC24A2) (NM_020344) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NCKX2
Synonyms:	NCKX2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG210194 representing NM_020344
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**

ATGGATCTGCAACAAAGCACCACCATCACTTCCCTAGAGAAATGGTGTGGATGAGTCACTGTCTGGCT
 GCAGAAGACATTATAGTGTCAAGAAAAAAGTGAAGTTAATTCGAGTCTTAGGCCTTTTCATGGGTCTGGT
 AGCCATTAGCACTGTCTCATTTTCAATCAGTGCCTTTTCTGAGACAGATACACAGAGCACAGGAGAGGCC
 AGTGTGTAAAGTGGCCCTAGGGTAGCACAGGGTTACCATCAGAGAACTCTCTAGATTTAAATGACAAGA
 TTCTGGATTATACTCCACAGCCACCTCTTTCTAAGGAAGGCGAGTCTGAGAATAGTACAGATCACGCCCA
 AGGAGACTACCCGAAAGACATCTTTCCCTTGAGGAGAGAAGAAAGGTGCGATCATTCTGCATGTCATT
 GGAATGATCTACATGTTTCATAGCCTTAGCCATTGTCTGTGATGAGTTCTTTGTTCTTCTTTGACTGTCA
 TCACTGAAAAAAGTGGGCATCTCTGATGATGTGGCTGGAGCCACCTTCATGGCTGCAGGAGGGTCAGCCCC
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 TCAGCAGTATTCAACATCCTCTTTGTTATTGGCATGTGTGCTCTGTTTTCTAGAGAAATCTTAAACCTGA
 CATGGTGGCCGCTCTTCGAGATGTGTCTTTCTACATTGTTGACTTGATCATGCTGATCATATTTTCTCT
 GGATAATGTATCATGTGGTGGGAAAGCTTGCTTCTCTTAACAGCTTATTTTGTATGTGGTTTTCATG
 AAATTCACAGTCCAAGTAGAAAAATGGGTGAAGCAATGATAAACCGCAATAAGGTGCTCAAGGTGACAG
 CACCAGAAGCCCAAGCAAGCCATCTGCAGCCAGGACAGGATGAACCAACTCTACCGGCTAAGCCGCG
 TCTCCAGCGAGGTGGAAGCTCTGCCTCCCTCCACAACAGTCTCATGAGGAATAGCATCTTCCAACATG
 ATACACACCCTTGACCCACTCGCCGAAGAACTTGGATCATATGGAAAACTAAAATATTATGACACAATGA
 CTGAAGAAGGGAGGTTTCAGAGAAAAGGTTCAATTCTCCACAAGATCGCCAAGAAGAAATGTCATGTGGA
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 AAGGTGCAGAAGCCAGACCGCTGATGAGGAGGAGGACCAGCCTCTCAGCCTTGCTGGCCTTCTGAAAC
 CCGCAAGCAAGTACGTTTCTGATTGTTTTCCCATAGTGTTCCTCTCTGGATTACGTTACCTGACGTT
 CGCAAACCTTCATCGAGGAAGTTTTTCCCATCACGTTCTTTGGCTCCATTACCTGGATTGCAGTATTCT
 CTTACTTGATGGTCTGGTGGGCGCACCAGGTTGGAGAGACAATTGGCATCAGTGAAGAGATTATGGGCCT
 GACCATCTTGGCTGCTGGGACCTCCATCCCTGATCTTATCACCAGTGTCAAGTGGCCCGGAAGGGGTTA
 GGGGACATGGCTGTGTCCAGCTCTGTTGGAAGCAACATTTTGTACATCACTGTAGGGCTCCCACTGCCCT
 GGCTCCTGTACACCGTCATTACAGATTCCAGCCAGTGGCTGTCAGCAGCAATGGCCTTTTCTGTGCCAT
 CGTCCTTCTCTTCATCATGCTGCTCTTCGTCATCTCTCTATCGCCCTCTGCAAGTGGCGAATGAACAAA
 ATCCTGGGCTTCATCATGTTTGGCCTCTACTTTGTGTTCTGGTGGTGGAGCGTTCTCTAGAAGACAGAA
 TTCTTACATGCCCGTCTCCATC

ACGCGTACGCGGGCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG210194 representing NM_020344
 Red=Cloning site Green=Tags(s)

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MDLQQSTTITSLEKWCLDESLSGCRRHYSVKKKLKLI RVLGLFMGLVAISTVSFSISAFSETDTQSTGEA
SVVSGPRVAQGYHQRTLLDLNDKILDYTPQPPLSKEGESENSTDHAQGDYPKIDIFSLEERRKGAILHVI
GMIYMFIALAIVCDEFFVPSLTVITEKLGISDDVAGATFMAAGGSAPELFTSLIGVFIHNSNVGIGTIVG
SAVFNILFVIGMCALFSREILNLTWPLFRDVSFYIVDLIMLIIFFLDNVIMWWESLLLLTAYFCYVVFMM
KFNVQVEKWVKQMINRNKVVKVTAPEAQAKPSAARDKDEPTLPAPRLQGGSSASLHNSLMRNSIFQLM
IHTLDPLAEELGSYGKLYDYDTMTEEGRFREKASILHKIAKKKCHVDENERQNGAANHVEKIELPNSTST
DVEMTPSSDASEPVQNGNL SHNIEGAEQA TADEEEDQPLSLAWPSETRKQVTFILVFPVIFPLWITLPDV
RKPSSRKFFPITFFGSITWIAVFSYLMVWWAHQVGETIGISEEIMGLTILAAGTSIPDLITSVIVARKGL
GDMAVSSSVGSNIFDITVGLPLPWLTYVIHRFPVAVSSNGLFCAIVLLFIMLLFVILSIALCKWRMNK
ILGFIMFGLYFVFLVVSLLDRILTCVSI
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TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020344

ORF Size: 1983 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_020344.4](#)

RefSeq Size: 10857 bp

RefSeq ORF: 1986 bp

Locus ID: 25769

UniProt ID: [Q9UI40](#)

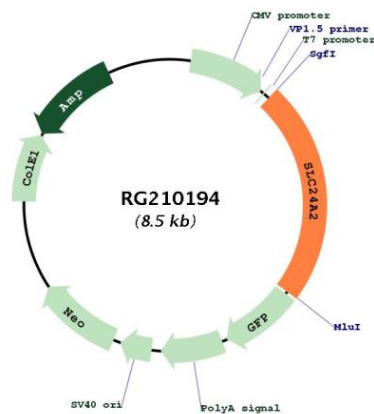
Cytogenetics: 9p22.1-p21.3

Domains: Na_Ca_Ex

Protein Families: Druggable Genome, Transmembrane

Gene Summary: This gene encodes a member of the calcium/cation antiporter superfamily of transport proteins. The encoded protein belongs to the SLC24 branch of exchangers, which can mediate the extrusion of one Ca²⁺ ion and one K⁺ ion in exchange for four Na⁺ ions. This family member is a retinal cone/brain exchanger that can mediate a light-induced decrease in free Ca²⁺ concentration. This protein may also play a neuroprotective role during ischemic brain injury. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2011]

Product images:



Circular map for RG210194