

Product datasheet for **RG220755**

WNK3 (NM_001002838) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	WNK3 (NM_001002838) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	WNK3
Synonyms:	PRKWNK3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG220755 representing NM_001002838 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCACTGATTCAGGGGATCCAGCCAGCACAGAAGATTCTGAGAACTGATGGAATTCATTTGAAA
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ATAAAGAAGACAAGAGAGAAGAAGCCTGCTGGCTGTTTGAAGAACGCAGGGATTCTCAGTGCAAGTCTA
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CACAACAATCTGTAGTAATCCCGCCCAATCTGGGGACCATTCAGCCAGGGATGAATATGCAGGCATT
TCCAATTCATCAGTGCAGAATCCTGCCACAATCCCTCTGGTCTAAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG220755 representing NM_001002838
Red=Cloning site Green=Tags(s)

MATDSGDPASTEDSEKPDGISFENRVPQVAATLTVEARLKEKNSTFSASGETVERKRRFRKSVEMTEDDK
VAESSPKDERIKAAMNIPRVDKLPSNVLRGGQEVKYEQCSKSTSEISKDCFKEKNEKEMEEEAEMKAVAT
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PIPLTRESTADTRALNRCKAMSGSFQRGRFQVITIPQQQSAKMTSFGIEHISVFSETNHSSEEAFIKTAK
SQLVEIEPATQNPKTSFSYEKLQALQETCKENKGVKQGNFLSFAACETDVSSVTPEKEFEETSATGS
SMQSGSELLKEREILTAKQPSSDSEFSASLAGSGKSVAKTGPESNQCLPHHEEQAYAQTQSSLFYSPS
SPMSSDDESEIEDEDLKVQLREKHIQEVVNLQTQONKELQELYERLRSIKDSKTQSTEIPLPPASPR
RPRSFKSLRSRQSLTHVDNGIVATDPLCVESNAASCQSPASKKGMFTDDLHKLVDWTKAVGNSLI
KPSLNQLKQSQHKLE TENWNKVS ENTPSTMGYTSTWISSLSQIRGAVPTSLPQGLSLPSFPGLSSYGM
HVCQYNAVAGAGYPVQWVIGISGTTQSSVVI PAQSGGPFQPGMNMQAFPTSSVQNPATIPPQPK

TRTRPLE – GFP Tag – V

Restriction Sites:

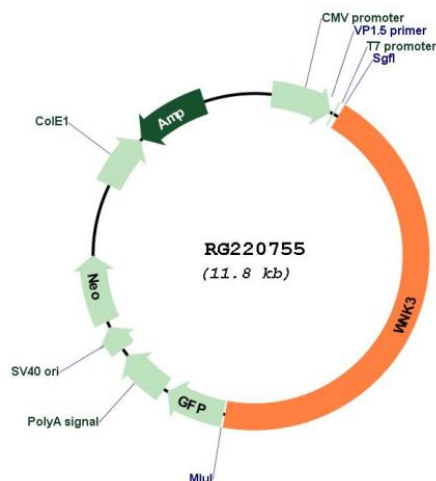
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001002838

ORF Size: 5229 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_001002838.4](#)

RefSeq Size: 7572 bp

RefSeq ORF: 5232 bp

Locus ID: 65267

UniProt ID: [Q9BYP7](#)

Cytogenetics: Xp11.22

Protein Families: Druggable Genome, Protein Kinase

Gene Summary: This gene encodes a protein belonging to the 'with no lysine' family of serine-threonine protein kinases. These family members lack the catalytic lysine in subdomain II, and instead have a conserved lysine in subdomain I. This family member functions as a positive regulator of the transcellular Ca²⁺ transport pathway, and it plays a role in the increase of cell survival in a caspase-3-dependent pathway. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2010]