

## Product datasheet for MR231872

### Wnk3 (NM\_001271678) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Wnk3 (NM\_001271678) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Wnk3  
**Synonyms:** Prkwkn3; Wnk3-ps  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >MR231872 representing NM\_001271678  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCACTGATTCTGGGGAGCCAGCTAGCACAGAAGATTCTGAGAAGCCTGATGGAGTTTCCTTTGAAA  
 ACAGGGCTGCCCGGGCTGTTGCCCTCTGACTGTAGAAGCGAGAATAAAGGAAAAATACAGTACCTTTTC  
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 GTTGCCGAATCTCCCGCAGAGATGAAAGAAAAGCTGCAACAAATATTTCAAGAGTAGATAAAGTTCCTA  
 CAAATGTGCTAAGAGGTGGGCAAGAAGTTAAATATGAGCAATGTTCAAAGGCAACCTCAGAAATCCTCAA  
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GGAATGTA CTTCCTCAACAGCAGACTGCAACTTTACAACCTACTCCTGGTCCACACACTGCAGCTGAGTA  
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**Protein Sequence:**

>MR231872 representing NM\_001271678  
Red=Cloning site Green=Tags(s)

MATDSGEPASTEDSEKPDGVSFENRAARAVAPLTVEARIKEKYSTFSASGENIERKRFRKSVEMTEDDK  
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SWESTLKGKKICIVLTELMTSGTLKTYLKRKVMKPKVLRSWCRQILKGLQLHTRTPPIIHRDLKCDNI  
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SNSSLALRLWVEDPKKLKGGHKDNEAIEFSFNLEADTPEEVAYEMVKS GFFHESDSKAVAKSIRDRVTLI  
KKIREKKPAGCLEERRDSQCKYVRNVL PQQQTATLQPTPGPHTAAEYEETEVDQHVRRQFLQGKPPQQSS  
SVRGDTSSSEPTAGPVLHSDTSSHTPVAYSSNQTTSSQE QPKLTQSPVLPVVQGSVMPYIYAAGVGVVVSQ  
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CPRPEKGTQFQLTVLQVSVSGDNMVEQCLETHNNKMVTFKFDVDGAPEDIADYMVEDNFVLENEKEK FV  
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INQTIKNREAQSPSLQPSMAMVPGLHPFPSSRNTSNQAISQNTVFTIENNP GHRELFTSKLDHKD VVDG  
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DVHIAYPGESVPIGGNAALTSVLVSSDQKQSLSVQ QPTIDAEFISKEGETTVNTETSSPKAVIATQTPG  
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VRQVETEDKRSAIASDPIPLTREFSSDTRALSRCKAMSGSFQRGRFQVITVPQQQPVKMMSFGKDH RPPF  
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QAYAQTQNSLFYSPSSPMSSDNESEIEDEDLKVELQRLREKH IQEVVSLQTQQNKELQELYERLRATKDN  
KAQSSEVPLSPASPRRPSFKSKLRSRQSMTHSDNLVVKDALGVESNTVSCQQSPASKGMFTDDLHKL  
VDDWTRETVGHFPSKPSLNQLKQSQQKSEAENWNKSC ESTPSTMGYTSNWISSL SQIRGAAPTSLPQGLP  
LPSFHGPLASYGMPHVCQYNAVGAAGYPVQWVGISGPAQQSVVLP TQSGGLFQPGMNLQSF PAPPVQNPA  
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

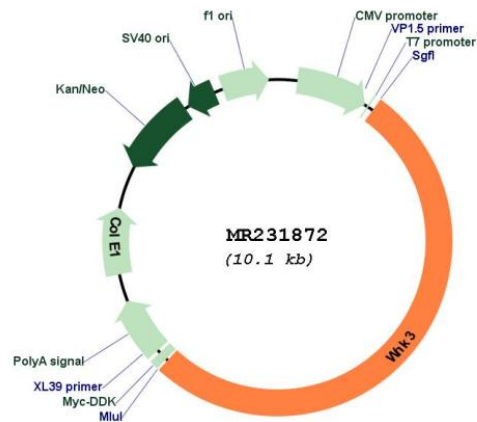
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



<b>ACCN:</b>	NM_001271678
<b>ORF Size:</b>	5271 bp
<b>OTI Disclaimer:</b>	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>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<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>	<a href="#">NM_001271678.1</a> , <a href="#">NP_001258607.1</a>
<b>RefSeq Size:</b>	10400 bp
<b>RefSeq ORF:</b>	5274 bp
<b>Locus ID:</b>	279561
<b>UniProt ID:</b>	<a href="#">Q80XP9</a>
<b>Cytogenetics:</b>	X F3
<b>MW:</b>	194.4 kDa
<b>Gene Summary:</b>	Serine/threonine kinase which plays an important role in the regulation of electrolyte homeostasis, cell signaling, survival and proliferation. Acts as an activator and inhibitor of sodium-coupled chloride cotransporters and potassium-coupled chloride cotransporters respectively. Activates SLC12A1, SLC12A2, SLC12A3, SCNN1A, SCNN1B, SCNN1D and SGK1. Inhibits SLC12A4, SLC12A5, SLC12A6 and SLC12A7. Phosphorylates WNK4. Increases Ca(2+) influx mediated by TRPV5 and TRPV6 by enhancing their membrane expression level via a kinase-dependent pathway. Inhibits KCNJ1 by decreasing its expression at the cell membrane in a non-catalytic manner.[UniProtKB/Swiss-Prot Function]