

## Product datasheet for MC229661

### Wnk3 (NM\_001271678) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Wnk3 (NM\_001271678) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Wnk3  
**Synonyms:** Prkwnk3; Wnk3-ps  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC229661 representing NM\_001271678  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGCCACTGATTCTGGGGAGCCAGCTAGCACAGAAGATTCTGAGAAGCCTGATGGAGTTTCCTTTGAAA  
 ACAGGGCTGCCCGGGCTGTTGCCCTCTGACTGTAGAAGCGAGAATAAAGGAAAAATACAGTACCTTTTC  
 TGCTTCCGGGAAAACATCGAAAGAAAGAGTTTTTCCGAAAGAGTGTTGAGATGACAGAAGATGACAAA  
 GTTGCCGAATCTTCCCGCAGAGATGAAAGAAAAGCTGCAACAAATATTTCAAGAGTAGATAAAGTTCCTA  
 CAAATGTGCTAAGAGGTGGGCAAGAAGTTAAATATGAGCAATGTTCAAAGGCAACCTCAGAAATCCTCAA  
 AGATTGCTTCAAGGAGAAAAGTAAAAGGAAATGGAAGAAGAAGCAGAAATGAAGGCTGTTGCAACTTCC  
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 TGGACTGAGACATGGGTTGAAGTTGCTTGGTGTGAGCTACAGGACCGCAAATTAATAAGCTGAGCA  
 GCAACGGTTCAAAGAAGAAGCAGAGATGTTGAAAGGCCTCCAGCATCCCAATATAGTTCGATTCTATGAT  
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 AAAAGGATTGCAGTTCTTACACACAAGGACGCCTCTATTATTCACCGGGATCTGAAATGTGACAACATT  
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 TTGCTAAGAGTGTCAATGGCACTCCTGAATTTATGGCTCCGGAGATGTATGAAGAACACTATGATGAATC  
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 CAGAATGCAGCACAAATATACCGGAAAGTAACCAAGTGGCATAAAAACAGCCAGCTTCAATAAAGTACAG  
 ACCCTGAAGTGAAGAAATAATTGAAGGATGTATTAGACAAAACAAATCTGAAAGTTATCTATCAAGGA  
 CTTACTAAACCATGCATTCTTTGCTGAGGATACTGGACTGAGGGTGGAGTTAGCAGAGGAAGATGATTGC  
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 GTCTGGATTCTTCCATGAAAGTATTCCAAAGCTGTTGCTAAGTCCATTAGGGACCGAGTGACATTGATT  
 AAAAAGATAAGGGAAAAAAGCCTGCTGGATGCTTGGAGGAACGCAGGGATTCCCAGTCAAGTATGTGA



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GGAATGTA CTTCCTCAACAGCAGACTGCAACTTTACAACCTACTCCTGGTCCACACACTGCAGCTGAGTA  
TGAAGAAACAGAAGTTGATCAACATGTTTCGACAGCAGTTTCTACAGGGCAAACCACAGCAGCAGTCTCC  
TCTGTTAGGGGTGACACTTCATCTGAGCCAACAGCTGGACCAGTTCTACATTCAGATACTTCAAGTCATC  
CCACTGTAGCCTATTCTTCAAACCAGACAACTAGCTCTCAGGAGCAGCCAAAGCTGACTCAGTCCCCAGT  
TTTGCCTGTGGTCAAGGTCAGTCTCTGTTATGCCATATATGCTGCTGGAGTTGGAGTTGTTTCACAG  
TCCCAAATCTCTCCCTTAACTATCCAGAAGGCTCACAGATAAAGCCTGTATCCCAACCAATTGGAGCTG  
AACAAACGCAACTCTTCAAATCCAGATTTTGTTCGAAGCTTGAATCAAGATGTGACATCTGTGAAAGA  
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AGATCATGACACCAGCTACTGATAATCCAATTATTCTGCTGCTTTGGTGTGCCAGTCCAGGTGAATG  
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ATACTATCCTATTCAATGCCAGAAGTATAGCCATCAGTCACTGTGGATTCAAGATAGCCCTGCACAAT  
CCCCAAATTTCAAACAACAGGCTCTAAGATTCTGTCCAATGTGGCTGCAAGTCAAGCTGCTCATATATC  
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GATGCTTCACTTCCAGGCGATCCAGAGGCTATCCTGCTGCTGTGCAAGCGATGGAACCATTCATCTGC  
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GTCCGTCGAAGTGAAACAGAAGATAAAAGATCAGCAATTGCTTCTGATCCCATTCCTCTGACACGGGAGT  
TCTCATCTGATACTAGGGCTTTGAGTAGATGTAAGCGATGAGTGGATCATTTACAGCGGGTTCGGTTCCA  
GGTGATTACTGTTCTCAGCAGCAGCCAGTAAAAATGATGTCTTTTGGGAAAGATCACAGACCGCCATTC  
AACAAAACAACAGTCCAGTCTAGTGAGCAAGCACTAACCTTTGCTGAAGTGCAGTGTCCGAGTTGATCG  
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GTCTTTCAGTCGCTACAGAAAAGATGTAACCTCAACCACAGAAGTTAGTGTGCAGTCTGGGTCTGAAC  
CGTTAGATAAAGAAAAAATGAGTCAACTCCTGGGAAACAGACATGTACAAATGAATTTTACGCCACTCT  
TGCTGGTAATAGAAAGTCCGTGACAAAAACTCGTCCAGAGGGTGATCAGTATTTACCACTCCGTGAAGAG  
CAAGCCTATGCTCAAACACAGAATTCACTCTTCTATTCTCCATCTTCCCAATGAGCAGTGACAATGAAT  
CAGAAAATTGAGGACGAGGACTTGAAAGTGGAGCTTCAAAGATTACGAGAAAAACACATTCAAGAGGTGGT  
CAGTCTTCAAACACAACAGAATAAAGAGCTACAAGAGCTCTATGAACGCCTTCGAGCACTAAAGACAAC  
AAAGCGCAATCTCAGAGGTTCTTTGTCACCTGCATCGCCACGAGGCAAGATCTTTCAAAGCAAAC  
TTCGAAGCGCCCCAGTCCATGACACATTGACACAATCTCGTTGTAAGAGTGCAGTGGTGTGGAGAG  
TAATACCGTGTATGCCAGCAATCTCCAGCCAGTAAGAAGGGGATGTTACAGATGATTTACACAAGCTG  
GTGGATGACTGGACAAGAGAAACAGTAGGGCATTTCCTAGTAAGCCAAGTTAAACCAACTCAAACAGA  
GCCAACAAAAATCCGAAGCAGAAAACTGGAACAAGTCAATGTGAAAGTACTCCATCTACTATGGGATACAC  
GTCAAACCTGGATTTCTTCTCTCTCCAAATTCGTGGAGCTGCCCAACTTCTTGGCACAAGGACTCCCA  
CTCCCTTCAATTCATGGGCCATTAGCATCATATGGAATGCCTCACGTTTGTGAGTATAATGCTGTGGGTG  
CCGAGGTTATCCAGTACAGTGGGTAGGAATTTCTGGACCAGCACACAGTCTGTAGTGTCTCTACCCA

ATCTGGGGGACTCTTCCAGCCCGGATGAATTTGCAGTCATTTCCAGCTCCACCAGTGCAGAATCCAGCT  
TCAATCCCTCCTGGTCCTAAATGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

<b>Restriction Sites:</b>	Sgfl-MluI
<b>ACCN:</b>	NM_001271678
<b>Insert Size:</b>	5274 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
<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>	<u>NM_001271678.1, NP_001258607.1</u>
<b>RefSeq Size:</b>	10400 bp
<b>RefSeq ORF:</b>	5274 bp
<b>Locus ID:</b>	279561
<b>UniProt ID:</b>	<u>Q80XP9</u>
<b>Cytogenetics:</b>	X F3

**Gene Summary:**

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]

Transcript Variant: This variant (1) is the longer transcript and encodes the longer isoform (1).

Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.