

Product datasheet for **MC229755**

Wnk1 (NM_001199083) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Wnk1 (NM_001199083) Mouse Untagged Clone
Tag: Tag Free
Symbol: Wnk1
Synonyms: 6430573H23Rik; EG406236; Hsn2; mKIAA0344; Prkwk1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC229755 representing NM_001199083
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCTGACGGTGCCGCGAGAAGCAAAGCGGCACTCCGGGCTTCCTTACGCCTCCGGCGCCCGTCCCCA
 AGAATGGCTCAAGCTCCGATTCTCCGTGGGCGAGAACTGGGGCTACGGTCGCCGACTCGGGAGTTGG
 CAGGACGGAGGAATATCGGCGCCCGCGCACACTATGGACAAGGACAGTCGTGGGGCGGCCGCCACCACC
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 CGGGCCTCCCTCTCTATCCCGCAACCTAGTGTACCTGCAGTGGTGCCCCAGAGTGCTCCACCCGAACC
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 CCTGGGGAACAAGCCGTGTAGGCTCGGCCACCACGACCGTCCCCAGCAGTACCAGCAAAGACCGCCCGG
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GAAAATACAAAGACAATGAAGCTATTGAGTTTTCTTTGACTTGGAGAGGGATGTACCAGAAGATGTTGC
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 AGTAGACAAGTGGGCCGAGATGCCATGAATCTTTCAAGCAGGAGAGGCAGCAAAGGACACATGAATTAT
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 GTGGCTTACCCCATCTCTGCAGCATCTGCTACCTCTCTAGGTCACCTTCAACCAATCCATGTGTCCCC
 ACAGCAGTATGGTTTTCCACCTGCCCATTTGGCACTCAGTGGAGTGGAAACAGGTGGTCCAGCACCAGC
 CCATTTGGCCAGTTCACCTGTAGGAACAGCATCCTTGCAAAAATTTCAACATCAGCAATTTGCAGAAGT
 CCATCAGCAACCCCCAGGTTCCAATCTACGGACCACCTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:

NM_001199083

Insert Size:

7881 bp

OTI Disclaimer:

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).

OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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:	<ol style="list-style-type: none">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:	<u>NM_001199083.1</u> , <u>NP_001186012.1</u>
RefSeq Size:	11319 bp
RefSeq ORF:	7881 bp
Locus ID:	232341
UniProt ID:	<u>P83741</u>
Cytogenetics:	6 F1
Gene Summary:	<p>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 SCNN1A, SCNN1B, SCNN1D and SGK1. Controls sodium and chloride ion transport by inhibiting the activity of WNK4, by either phosphorylating the kinase or via an interaction between WNK4 and the autoinhibitory domain of WNK1. WNK4 regulates the activity of the thiazide-sensitive Na-Cl cotransporter, SLC12A3, by phosphorylation. WNK1 may also play a role in actin cytoskeletal reorganization. Phosphorylates NEDD4L. Acts as a scaffold to inhibit SLC4A4, SLC26A6 as well as CFTR activities and surface expression, recruits STK39 which mediates the inhibition (PubMed:21317537, PubMed:23542070).</p> <p>[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (4) has multiple differences in the coding region but maintains the reading frame compared to variant 5. This variant represents the exon combination of the brain and spinal cord variant described in Figure 2F of PubMed ID 18521183. This variant encodes isoform 4, which is shorter than isoform 5 but has the same N- and C-termini.</p> <p>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.</p>