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Product datasheet for RC223269

WNK4 (NM_032387) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	WNK4 (NM_032387) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	WNK4
Synonyms:	PHA2B; PRKWNK4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC223269 representing NM_032387
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
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CCGCGAGGAGCCCACCGCCTAGCTCCAAAGAACCCCCCGAGGGCACGTGGACCGAGGGAGCCCCTGTGAA
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GAGATGGTGGCTCTGGGCTTGGTCTGTGAAGCCGATTACCAGCCAGTGGCCCGTGCAGTACGTGAACGGG
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Protein Sequence:

>RC223269 representing NM_032387
Red=Cloning site Green=Tags(s)

MLASPATETTVLMSQTEADLALRPPPPLGTAGQPRLGPPPRRARRFSGKAEPRPRSSRLSRRSSVDLGLL
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KGSFPTSRRNSLQRSEPPGPGIMRRNSLSGSSTGSQEQRASKGVTFAGDVGRM

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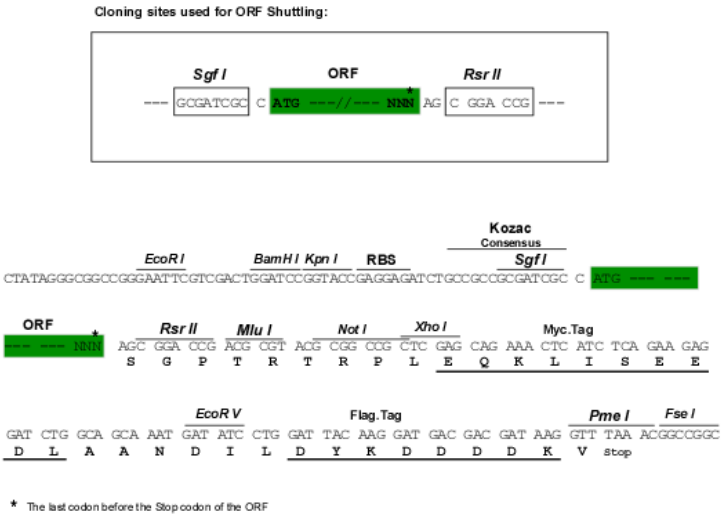
Chromatograms: https://cdn.origene.com/chromatograms/mk8011_d01.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:

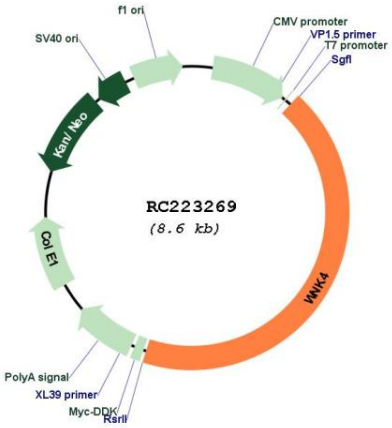


ACCN: NM_032387

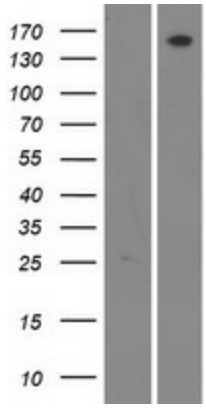
ORF Size: 3729 bp

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_032387.5
RefSeq Size:	4147 bp
RefSeq ORF:	3732 bp
Locus ID:	65266
UniProt ID:	Q96J92
Cytogenetics:	17q21.2
Protein Families:	Druggable Genome, Protein Kinase
MW:	134.6 kDa
Gene Summary:	This gene encodes a member of the WNK family of serine-threonine protein kinases. The kinase is part of the tight junction complex in kidney cells, and regulates the balance between NaCl reabsorption and K(+) secretion. The kinase regulates the activities of several types of ion channels, cotransporters, and exchangers involved in electrolyte flux in epithelial cells. Mutations in this gene result in pseudohypoaldosteronism type IIB.[provided by RefSeq, Sep 2009]

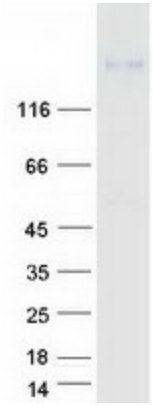
Product images:



Circular map for RC223269



Western blot validation of overexpression lysate (Cat# [LY410153]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223269 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified WNK4 protein (Cat# [TP323269]). The protein was produced from HEK293T cells transfected with WNK4 cDNA clone (Cat# RC223269) using MegaTran 2.0 (Cat# [TT210002]).