

Product datasheet for TP511822

Wnk4 (NM_175638) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse WNK lysine deficient protein kinase 4 (Wnk4), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR211822 representing NM_175638 Red=Cloning site Green=Tags(s)

MLAPRNTETGVPMSQTEADLALRSPALTSTGPTRLGPPRRVRRFSGKAEP RPRSSRPSRRSSVDLGLL
SSWSQPASLLPEPPDPPDSAGPTRSPSSSKEPPEGTWMGAAPVKA VDSACPELTGSSGGPGSREPPRPV
DAAARERRREQUEEKEDTETQAVATSPDGRYLKFDIEIGRGSFKTVYRGLD TDTTVEVAWCELQTRKLSRA
ERQRFSEEVEMLKGLQHPNIVRFYDSWKSVLRGQVCIVLTELMTSGTLKTYLRRFREM KPRVLQRWSRQ
ILRGLHFLHSRVPPILHRDLKCDNVFITGPSGSVKIGDLGLATLKRASF AKSVIGTPEFMAPEMYEEKYD
EAVDVYAFGMCMLEMATSEYPYSECQNAAQIYRKVTSGTKPNSFYKVKMPEVKEIIEGCIRTDKNERFTI
QDLLAHAFFREERG VHVLAEEDDGKPGKLWLRMEDARRGGRPRDNQAI EFLFQLGRDAAEEVAQEMV
ALGLVCEADYQPVAVRERVA AIQRKREKLRKARELEVLPDPSGPPPATVSLAPGPPSAFPPEPEEPEA
DQHQSFLFRHASYSSTSDCETDGYLSSSGFLDASDPALQPPGGLPSSPAESHLC LPSGFALSIPRSGPG
SDFSPGDSYASDAASGLSDMGEGGQMRKNPVKTLRRRPRSRRLRVTSVSDQSDRVVECQLQTHNSKMVTFR
FDLDGDSPEEIAAAMVYNEFILP SERDGFLSRIREIQRVETLLKRDAGPPEAAEDALSPQE EPAALPAL
PGPPNAEPQRSISPEQRSWA AFSTSPSSPGTLPSPGAPFSPGTPPVFPCPIFIPITSPSCYPCPFSQVSSN
PYPQAPSSLLPLSSASQVPLPSSSLPISAPLPFSPSYQDPLSPTSLPVCPSPPSLPSTTAAPLLSLAS
AFSLAVMTVAQ SLLSPSPGLLSQSPAPPGLPSLPLSLASCDQESLSAQTAETENEASRNPAQPLLGDA
RLAPISEEGKPQLVGRFQVTSSKEPAEP LQPASPTLSRSLKLPSPPLTSESSD TEDSAAGGPETREALA
ESDRAAEG LGVAVDDEKDEGKEPLLGGSSPILSHSPVWMNYSYSSLCLSS EESSESSGEDEEFWAE LQNL
RQKHLSEVEALQTLQKKEIEDLYSRLGKQPPP GIVAPAAMLSCRQRRLSKGSFPTSRRNSLQRSDLP GP
IMRRNSLSGSSTGSQEQRASKGVTFAGDIGRM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	132.9 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method



[View online »](#)

Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_783569
Locus ID:	69847
UniProt ID:	Q80UE6
RefSeq Size:	4148
Cytogenetics:	11 D
RefSeq ORF:	3666
Synonyms:	2010002J11Rik; Pha2b; Prkwk4
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 SCNN1A, SCNN1B, SCNN1D, SGK1, TRPV5 and TRPV6. Regulates the activity of the thiazide-sensitive Na-Cl cotransporter, SLC12A3, by phosphorylation which appears to prevent membrane trafficking of SLC12A3. Also inhibits the renal K(+) channel, KCNJ1, via a kinase-independent mechanism by which it induces clearance of the protein from the cell surface by clathrin-dependent endocytosis. WNK4 appears to act as a molecular switch that can vary the balance between NaCl reabsorption and K(+) secretion to maintain integrated homeostasis. Phosphorylates NEDD4L. Acts as a scaffold to inhibit SLC4A4 as well as CFTR activities and surface expression, recruits STK39 which mediates the inhibition (PubMed:21317537).[UniProtKB/Swiss-Prot Function]