OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC219277

SLC17A4 (NM_005495) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC17A4 (NM_005495) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC17A4
Synonyms:	KAIA2138
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC219277 representing NM_005495
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTACCGGACCAGATGTCAAGGCTACAGTGGGGGACATTTCCAGTGATGGCAATTTAAACGTGGCTC
AAGAGGAATGCTCCAGGAAAGGTTTTTGTTCAGTCCGACATGGGCTGGCCCTCATCTTGCAGCTCTGTAA
TTTTTCAATTTACACCCAACAAATGAACTTGAGCATTGCCATTCCAGCTATGGTGAACAACACAGCCCCA
CCTAGCCAGCCCAATGCCTCCACAGAACGGCCCTCCACTGACTCCCAGGGCTACTGGAATGAAACTCTAA
AAGAATTTAAAGCAATGGCCCCTGCATATGACTGGAGTCCTGAAATCCAGGGAATCATCCTCAGCTCCCT
CAACTATGGCTCATTCTTGGCTCCAATCCCCAGTGGCTATGTGGCTGGAATATTTGGAGCCAAGTATGTG
GTTGGTGCTGGCTTGTTTATTTCCTCATTCCTGACCCTCTTCATTCCACTGGCAGCTAATGCGGGAGTGG
CCTTGCTCATTGTCCTCCGGATTGTACAAGGCATAGCCCAGGTTATGGTATTAACTGGTCAGTATTCAAT
TTGGGTCAAATGGGCTCCCCCACTGGAAAGGAGTCAACTCACCACCATTGCTGGATCAGGGTCAATGCTG
GGGTCCTTCATTGTTCTACTTGCTGGTGGTCTCCTCTGCCAGACCATAGGATGGCCTTACGTCTTCTATA
TCTTTGGAGGAATTGGCTGTGCTTGTTGTCCTCTCTGGTTTCCTCTCATTTATGATGATCCTGTGAATCA
TCCCTTTATCAGTGCTGGTGAGAAGAGATACATTGTGTGTTCATTGGCTCAGCAGGACTGTTCACCAGGC
TGGTCTCTTCCCATTAGGGCTATGATCAAATCCTTACCACTCTGGGCCATTTTAGTCTCTTATTTCTGTG
AATACTGGCTTTTTTATACCATTATGGCGTACACACCAACGTACATCAGCTCGGTACTTCAAGCCAACCT
CAGAGATAGTGGGATCCTGTCTGCCTTGCCGTTTGTTGTTGGATGTATCTGCATTATCCTTGGAGGTCTA
CTGGCAGACTTTCTTCTCTCCAGAAAAATCCTCAGACTCATCACCATCAGGAAACTCTTCACTGCCATTG
GGGTTCTCTTCCCATCCGTGATCCTCGTGTCCCTGCCCTGGGTCAGATCCAGCCACAGCATGACCATGAC
CTTCTTGGTGCTGTCTTCTGCCATCAGCAGCTTCTGTGAATCAGGAGCCCTTGTTAACTTCTTGGATATT
GCTCCTCGGTACACTGGCTTTCTCAAAGGACTATTGCAAGTCTTTGCACACATAGCTGGAGCCATCTCTC
CTACTGCTGCTGGATTTTTCATCAGTCAGGATTCAGAGTTTGGTTGGAGAAATGTCTTCTTGCTTTCAGC
TGCTGTTAACATATCGGGCCTGGTTTTCTACCTCATCTTTGGCCGAGCAGATGTGCAGGACTGGGCTAAG
GAGCAGACATTCACCCACCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC219277 representing NM_005495
Red=Cloning site Green=Tags(s)

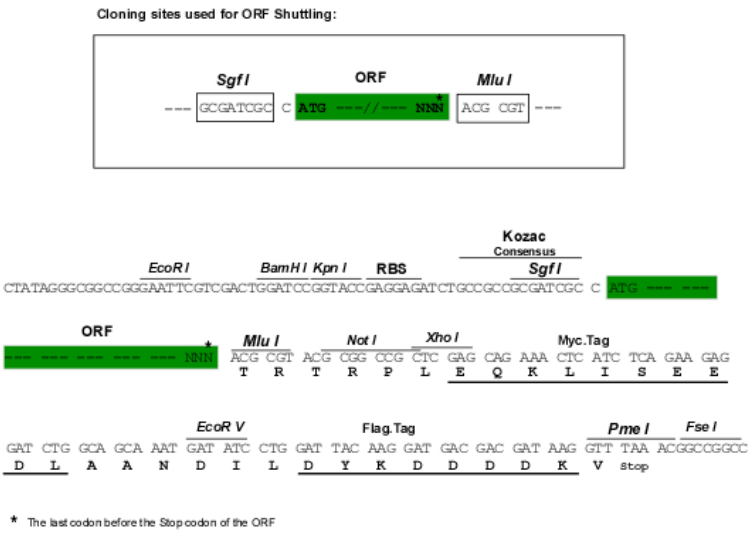
MSTGPDVKATVGDISSDGNLNVAQEECSRKGFCSVRHGLALILQLCNFSIYTQQMNLSIAIPAMVNNTAP
PSQPNASTERPSTDSQGYWNETLKEFKAMAPAYDWSPEIQGIILSSLNYGSFLAPIPSGYVAGIFGAKYV
VGAGLFISSFLTLFIPLAANAGVALLIVLRIVQGIAQVMVLTGQYSIWVKWAPPLERSQLTTIAGSGSML
GSFIVLLAGGLLCQTIGWPYVFYIFGGIGCACCPLWFPLIYDDPVNHPFISAGEKRYIVCSLAQQDCSPG
WSLPIRAMIKSLPLWAILVSYFCEYWLFYTIMAYTPTYISSVLQANLRDSGILSALPFVVGCICIILGGL
LADFLLSRKILRLITIRKLFTAIGVLFPSVILVSLPWVRSSHSMTMTFLVLSSAISSFCESGALVNFLDI
APRYTGFLKGLLQVFAHIAGAISPTAAGFFISQDSEFGWRNVFLLSAAVNISGLVFYLIFGRADVQDWAK
EQTFTHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8008_c12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005495

ORF Size: 1491 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_005495.1, NP_005486.1

RefSeq Size: 2626 bp

RefSeq ORF: 1494 bp

Locus ID: 10050

UniProt ID: Q9Y2C5

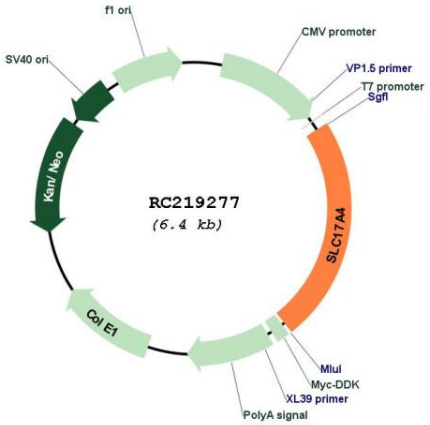
Cytogenetics: 6p22.2

Protein Families: Transmembrane

MW: 53.9 kDa

Gene Summary: Phosphate homeostasis is maintained by regulating intake, intestinal absorption, bone deposition and resorption, and renal excretion of phosphate. The central molecule in the control of phosphate excretion from the kidney is the sodium/phosphate cotransporter NPT1 (SLC17A1; MIM 182308), which is located in the renal proximal tubule. NPT1 uses the transmembrane electrochemical potential gradient of sodium to transport phosphate across the cell membrane. SLC17A4 is a similar sodium/phosphate cotransporter in the intestinal mucosa that plays an important role in the absorption of phosphate from the intestine (summary by Shibui et al., 1999 [PubMed 10319585]).[supplied by OMIM, Feb 2011]

Product images:



Circular map for RC219277