

## Product datasheet for **RC206029**

### SLC20A2 (NM\_006749) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLC20A2 (NM_006749) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC20A2
Synonyms:	GLVR-2; GLVR2; IBGC1; IBGC2; IBGC3; MLVAR; PIT-2; PIT2; Ram-1; RAM1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC206029 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGCCATGGATGAGATTTGTGGATGGTCATTTTGGGTTTCATCATAGCTTTTCATCTTGGCCTTTTCTG  
TTGGTGCAAACGATGTTGCCAACTCCTTTGGTACAGCCGTGGGCTCTGGTGTGGTGACCTTGAGGCAGGC  
ATGCATTTTAGCTTCAATATTTGAAACCACCGGCTCCGTGTTACTAGGCGCCAAAGTAGGAGAAACCATT  
CGCAAAGGTATCATTGACGTGAACCTGTACAACGAGACGGTGGAGACTCTCATGGCTGGGGAAGTTAGTG  
CCATGGTTGGTCCGCTGTGTGGCAGCTGATTGCTTCCTTCCTGAGGCTTCCAATCTCAGGAACGCACTG  
CATTGTGGGTTCTACTATAGGATTCTCACTGGTCGCAATCGGTACCAAAGGTGTGCAGTGGATGGAGCTT  
GTCAAGATTGTTGCTTCTGGTTTATATCTCCACTGTTGTCTGGTTTCATGTCTGGCCTGCTGTTGTAC  
TCATCAGAATTTTCATCTAAAAAAGGAAGACCCTGTTCCAATGGCCTCCGGGCACTCCAGTATTCTA  
TGCTGCTACCATAGCAATCAATGCTTTTCCATCATGTACACAGGAGCACCAGTGTCTGGCCTTGTCTC  
CCCATGTGGGCCATAGCCCTCATTTCCTTTGGTGTGCGCCCTCTGTTTCGCTTTTTTTGTGTGGCTCTTCG  
TGTGTCCGTGGATGCGGAGGAAAATAACAGGCAAATTACAAAAAGAAGGTGCTTTATCACAGTATCTGA  
CGAAAGCCTCAGTAAGGTTCAGGAAGCAGAGTCCCCAGTATTTAAAGAGCTACCAGGTGCCAAGGCTAAT  
GATGACAGCACCATCCCGCTCACGGGAGCAGCAGGGGAGACACTGGGGACCTCGGAAGGCACTTCTGCGG  
GCAGCCACCCTCGGGCTGCATACGGAAGAGCACTGTCCATGACCCATGGCTCTGTGAAATCGCCCATCTC  
CAACGGCACCTTCGGCTTCGACGGCCACACCAGGAGCGACGGTCAATGTGTACCACACCGTGCACAAAAG  
TCGGGGCTCTACAAAGATCTGCTGCACAAAATCCACATCGACAGGGGCCCCGAGGAGAAGCCAGCCAGG  
AAAGCAACTACCGGCTGCTGCGCCGAAACAACAGTTACACCTGCTACACCGCAGCCATTTGTGGGCTGCC  
AGTGACAGCCACCTTTCGAGCTGCGGACTCATCGGCCCCAGAGGACAGTGAGAAGCTGGTGGGCGACACC  
GTGTCCTACTCCAAGAAGAGGCTGCGCTACGACAGCTACTCGAGCTACTGTAACGCGGTGGCAGAGGCGG  
AGATCGAGGCGGAGGAGGCGCGGTGGAGATGAAGCTGGCGTCCGAGCTGGCCGACCCTGACCAGCCGCG  
AGAGGACCCTGCAGAGGAGGAGAAGGAGGAGAAGGACGCACCCGAGGTTACCTCCTGTTCCATTTCTG  
CAGGTCCTCACCGCCTGTTTCGGGTCCTTTGCTCACGGCGGCAATGACGTGAGTAATGCCATCGGTCCCC  
TGGTAGCCTTGTGGCTGATTTACAAACAAGGCGGGTAACGCAAGAAGCAGCTACACCCGCTGGCTGCT  
GTTTTATGGAGGAGTTGGAATCTGCACAGGCTCTGGGCTGCGGGGAGAAGAGTGATCCAGACCATGGG  
AAGGACCTCACTCCCATCAGCCGTCAGCGGCTTACAGATCGAGCTGGCCTCAGCCTTACAGTGGTGA  
TCGCCTCCAACATCGGGCTTCCAGTCAACAGCAGCTGTAAGGTGGGCTCGGTGGTGGCCGTGGGCTG  
GATCCGCTCCCGCAAGGCTGTGGACTGGCGCTCTTTCGGAACATCTTCGTGGCCTGGTTCGTGACCGTC  
CCTGTGGCTGGGCTGTTGAGCGCTGCTGTATGGCTCTTCTCATGTATGGGATCCTTCCATATGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC206029 protein sequence  
 Red=Cloning site Green=Tags(s)

MAMDEYLMWVILGFIIAFILAFSVGANDVANSFGTAVGSGVVTLRQACILASIFETTGSVLLGAKVGETI  
 RKGIIDVNLVNETVETLMAGEVSAMVGSVAWQLIASFLRLPISGTHCIVGSTIGFSLVAIGTKGVQWML  
 VKIVASWFI SPLLSGFMSGLLFVLRIRIFILKKEDPVPNGLRALPVFYAATIAINVFSIMYTGAPVLGLVL  
 PMWAIALISFGVALLFAFFVWLFVCPWMRRKITGKLQKEGALSRVSDLSKVQEAESPVKELPGAKAN  
 DDSTIPLTGAAGETLGTSEGTSAGSHPRAYGRALSMTHGSVKSPISNGTFGFDGHTSDGHVYHTVHKD  
 SGLYKDLLHKIHDGRPEEKPAQESNYRLLRRNNSYCYTAAICGLPVHATFRAADSSAPEDSEKLVGDT  
 VSYSKRRLRYDSYSSYCNAAVAEAEIEAEEGGVEMKLAELADPDQPREDPAAAAEKEEKDAPEVHLLFHFL  
 QVLTACFGSAHGGNDVSNIGPLVALWLIYKQGGVTQEATPVWLLFYGGVGICTGLWWGRRVIQTMG  
 KDLTPITSSGFTIELASAFTVVIASNIGLPVSTTHCKVGSVVAVGWIRSRKAVDWRLFRNIFVAWFVTV  
 PVAGLFSAAVMALLMYGILPYV

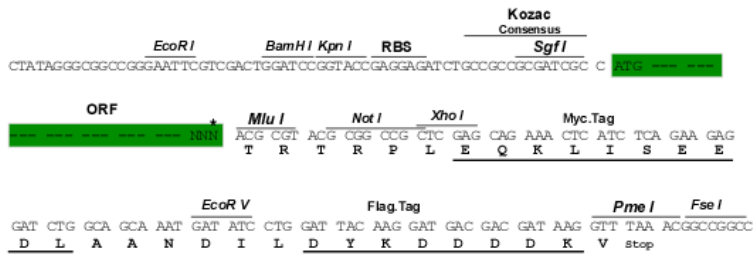
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6072\\_h11.zip](https://cdn.origene.com/chromatograms/mk6072_h11.zip)

Restriction Sites: Sgfl-MluI

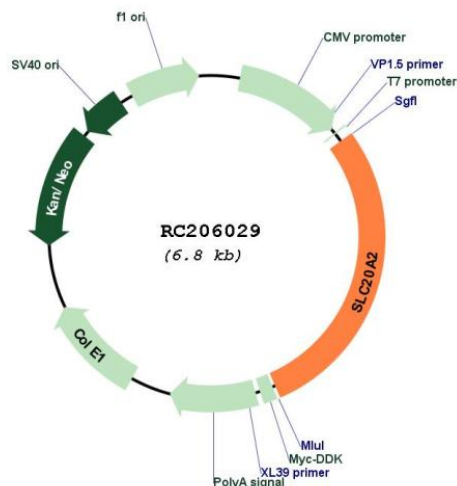
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM\_006749

ORF Size: 1956 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.

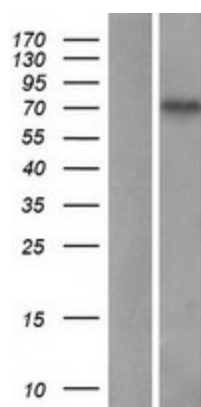
RefSeq: [NM\\_006749.5](#)

RefSeq Size: 3971 bp

RefSeq ORF:	1959 bp
Locus ID:	6575
UniProt ID:	<a href="#">Q08357</a>
Cytogenetics:	8p11.21
Domains:	PHO4
Protein Families:	Druggable Genome, Transmembrane
MW:	70.4 kDa

**Gene Summary:** This gene encodes a member of the inorganic phosphate transporter family. The encoded protein is a type 3 sodium-dependent phosphate symporter that plays an important role in phosphate homeostasis by mediating cellular phosphate uptake. The encoded protein also confers susceptibility to viral infection as a gamma-retroviral receptor. Mutations in this gene may play a role in familial idiopathic basal ganglia calcification. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Mar 2012]

### Product images:



Western blot validation of overexpression lysate (Cat# [LY416446]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206029 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).