

Product datasheet for **RC222683**

SLC7A14 (NM_020949) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC7A14 (NM_020949) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC7A14
Synonyms:	PPP1R142
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC222683 representing NM_020949
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGTGGCTTCTCACCTCGTGGACCCCGCGGGTGCAGTGGGAGCTGCCTGGTATGCAATGCACT
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 TAAGTAGCCAGGTACTCACCACAGTGGACCTCATCTCTTTGGCGTTGGCAGCTGTGTGGCACTGGC
 ATGTATGTGGTCTCTGGCCTGGTGGCAAGGAAATGGCAGGACCTGGTGTATTGTCTTCATCATTG
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 GAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence: >RC222683 representing NM_020949
Red=Cloning site Green=Tags(s)

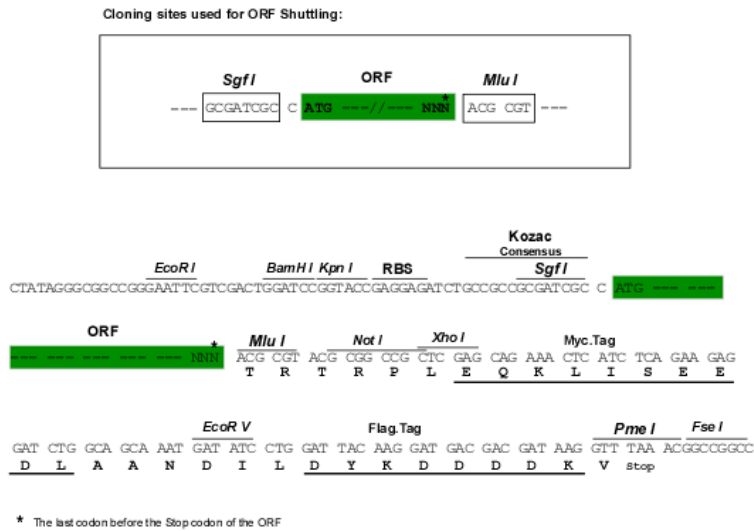
MSGFFTSLDPRRVQGAAWYAMHSRILRTKPVESMLEGTGTTTAHGTKLAQVLTVDLISLGVGSCVGTG
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IGFNNVLNVLNLAVWVFIAMIAGLFFINGKYWAEGQFLPHGWSGVLQGAATCFYAFIGFDIIATTGEEAKN
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LGSLFPMPRVIYAMAGDGLLFRFLAHVSSYTETPVVACIVSGFLAALLALLVSLRDLIEMMSIGTLLAYT
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SLG
DNEMLIGRSDKSTYNVNHHPNYGTVDMTTGIEADESENIYL IKLKKLIGPHYTMRIRLGLPGKMDRPTAA
TGHTVTICVLLLFILMFIFCSFIIFGSDYISEQSWWAILLVLMVLLISTLVFVILQQPENPKLPYMAP
CLPFVPAFAMLVNIYMLKLSTITWIRFAVWCFVGLLIYFGYGIWNSTLEISAREEALHQSTYQRYD
VDD
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DYSP
E

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8010_e06.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_020949

ORF Size: 2313 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_020949.1](#), [NP_066000.1](#)

RefSeq Size: 2909 bp

RefSeq ORF: 2316 bp

Locus ID: 57709

UniProt ID: [Q8TBB6](#)

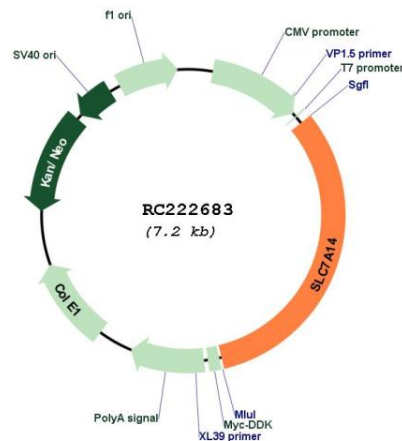
Cytogenetics: 3q26.2

Protein Families: Druggable Genome, Transmembrane

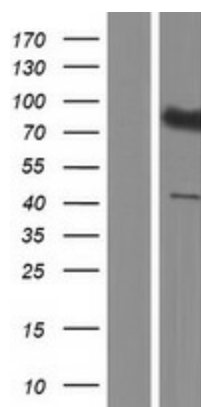
MW: 83.9 kDa

Gene Summary: This gene is predicted to encode a glycosylated, cationic amino acid transporter protein with 14 transmembrane domains. This gene is primarily expressed in skin fibroblasts, neural tissue, and primary endothelial cells and its protein is predicted to mediate lysosomal uptake of cationic amino acids. Mutations in this gene are associated with autosomal recessive retinitis pigmentosa. In mice, this gene is expressed in the photoreceptor layer of the retina where its expression increases over the course of retinal development and persists in the mature retina. [provided by RefSeq, Apr 2014]

Product images:



Circular map for RC222683



Western blot validation of overexpression lysate (Cat# [LY412174]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222683 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).