

Product datasheet for **RG202547**

SLC7A4 (NM_004173) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SLC7A4
Synonyms:	CAT-4; CAT4; HCAT3; VH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG202547 representing NM_004173
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCCCGGGGGCTGCCACCATTGCTAGCCTGGCACGCTTATGCCAGAAGCTGAACCGCCTGAAGCCGC
 TGGAGGACTCCACCATGGAGACGCTCACTGCGGCGCTGCCTGTCCACGCTGGACCTGACTCTTCTGGGCGT
 GGGTGGCATGGTGGGCTCGGGTCTCTACGTGCTCACAGGTGCCGTGGCCAAGGAGGTGGCTGGCCCTGCT
 GTGCTCTTGTCTTCGGTGTGGCCGCTGTGGCTCCCTGCTGGCAGCCCTATGCTATGCAGAATTTGGGG
 CACGTGTGCCACGACGGGCTCTGCCTACCTGTTACCTACGTATCCATGGCGAGCTGTGGGCTTCTCT
 CATCGGCTGGAATGTTCTCCTCGAATACATCATCGGTGGCGCGCCGTGGCCCGTGCCTGGAGTGGCTAC
 CTGGACTCTATGTTACGCCACAGCATCCGCAACTTCACTGAGACCCACGTGGGTTCTTGGCAGGTGCCCC
 TCCTGGGCACTACCCGACTTCTGGCTGCTGGCATCATCTCTGGCCTCTGCCCTTGTCTCTGTGG
 AGCCCCGCTGCTCTGGCTCAATCACACCTTCTGGCCATCAGCCTGCTTGTATTCTCTTCATTGTC
 ATCCTGGGCTTATCCTGGCCAGCCTCACAACCTGGAGCGCTGACGAAGCGGGCTTTCACCCCTTCGGCT
 TCTCCGGCGTATGGCCGGCACTGCCTCCTGCTTCTATGCTTTCGTGGGCTTCGACGTCAATGCGCCTC
 CAGTGAGGAGGGCCAGAACCCACGGCGTCTGTGCTCTGGCCATCGCCATCTCGCTTGGCATTGACAGT
 GGTGCTACATCCTTGTCTCCACCGTGTAAACCTCATGGTGGCTGGCACAGCCTGGACCCGACTCAG
 CGCTTGACAGTGCCTTCTACAGCGGGGCTACAGGTGGGCTGGCTTTCATCGTGGCAGCTGGCTCCATCTG
 CGCCATGAACACCGTCTGCTCAGCCTCCTCTTCTCCCTGCCACGCATTGTCTATGCCATGGCCGCGCAT
 GGGCTCTTCTCCAGGTGTTTGCCCATGTGCACCCCGGACACAGGTGCCTGTGGCGGGCACCTGGCGT
 TCGGGCTCCTACGGCCTTCTGGCACTGCTGCTGGACCTGGAGTCGCTGGTTCACTTCTGTCCCTTGG
 CACACTCCTGGCCTACACATTCGTGGCCACAGTATCATTGTGCTGCGCTTCCAGAAGTCTTCCCGGCC
 AGCTCCCCAGGGCCAGCCAGCCTGGCCCCCTGACCAAGCAGCAGAGCTCCTTCTCAGACCCTACAGC
 TGGTGGGCACTGTACACGCTCCGTCCTGAGCCAGGGGAGCTGAAGCCAGCCTGAGGCCCTACCTGGG
 CTTCTTGGATGGGTACAGCCCTGGAGCAGTGGTGAATTGGGCGCTTGGCGTTATGTTGGCCTCAGCCATC
 ACCATAGGCTGCGTGCTTGTCTTTGGAACTCGACCCCTGCACCTCCACACTGGGGTTACATCCTGCTGC
 TCCTGCTCACCAGTGTATGTTTCTGCTCAGCCTCCTTGTCTGGGGGCTCACCAGCAACAGTATCGGGA
 AGACTATTTCAGATCCCATGGTTCCTGATTCCAGCCCTGAGCATCGTCTCAACATCTGCCTCATG
 CTGAACTTAGCTATCTGACCTGGGTGCGCTTCTCCATCTGGCTGCTGATGGGACTTGACGTGATTTTCG
 GCTATGGCATCCGGCATAGCAAGGAGAACCAGCGGGAGCTGCCAGGGCTGAACTCCACACTACGTGGT
 ATTCCCCAGGGGACCTGGAGGAGACAGTGCAGGCTATGCAGCCCCCAGCCAGGCACCAGCACAGGAC
 CCTGGCCATATGGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG202547 representing NM_004173
 Red=Cloning site Green=Tags(s)

MARGLPTIASLARLCQKLNRLKPLEDSTMETSLRRCLSTLDLTLLGVGGMVGSGLYVLTGAVAKEVAGPA
 VLLSFGVAVASLLAALCYAEFGARVPRTGSAFLFTYVSMGELWAFIIGWNVLEYIIGGAAVARAWSGY
 LDSMFHSIRNFTETHVGSWQVPLLGHYPDLAAGIILLASAFVSCGARVSSWLNHTFSAISLLVILFIV
 ILGFIQAQPHNWSADEGGFAPFGSGVMAGTASCFYAFVGFVDVIAASSEEQNP RRVSPLAIAISLAIAA
 GAYIIVSTVLTLMVPWHSLLDPDSALADAFYQGRYRAGFIVAAGSICAMNTVLLSLLFSLPRIVYAMAAD
 GLFFQVFAHVHPRTQVPVAGTLAFLALLDLESVQFLSLGTLAYTFVATSIIVLRFQKSSPP
 SSPGPASPGLTKQSSFSDDLQLVGTVHASVPEPGELKPALRPYLGLDGYSPGAVVTWALGVMLASAI
 TIGCVLVFGNSTLHLPHWGYILLLLTSMFLLSLLVLGAHQYQYREDLFQIPMVPLIPALSIVLNICLM
 LKLSYLTWVRF SIWLLMGLAVYFYGIRHSKENQRELPLNSTHYVVFPRGSLEETVQAMQPPSQAPAQD
 PGHME

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004173

ORF Size: 1905 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:

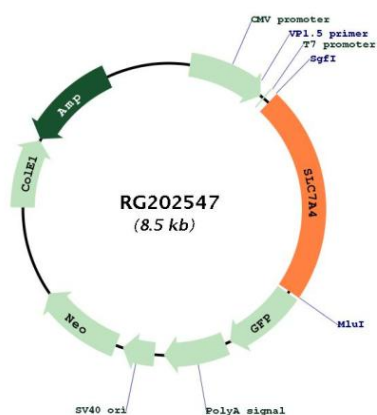
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_004173.3](#)

RefSeq Size:	2323 bp
RefSeq ORF:	1908 bp
Locus ID:	6545
UniProt ID:	O43246
Cytogenetics:	22q11.21
Domains:	aa_permeases
Protein Families:	Druggable Genome, Transmembrane
Gene Summary:	Involved in the transport of the cationic amino acids (arginine, lysine and ornithine). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG202547