

Product datasheet for **RG219103**

SLC45A2 (NM_016180) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SLC45A2
Synonyms:	1A1; AIM1; MATP; OCA4; SHEP5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence: >RG219103 representing NM_016180
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGGTAGCAACAGTGGGCAGGCTGGCCGCCACATCTATAAATCCCTAGCTGATGATGGCCCTTTGACT
 CTGTGGAGCCGCTAAAAGACCCACCAGCAGACTCATCATGCACAGCATGGCCATGTTTCGGAAGAGAGTT
 CTGCTACGCGGTGGAGGCAGCGTATGTGACCCAGTCTGCTCAGCGTAGGTCTGCCAGCAGCCTGTAC
 AGCATTGTGTGGTTCCTCAGCCCCATCCTGGGATTCTGTGTCAGCCCGTGGTTCGGATCGGCCAGCGACC
 ACTGCCGCTCCAGGTGGGGCCGCCGAGACCCTACATCCTCACCCTGGGAGTCATGATGCTCGTGGGCAT
 GGCTCTGTACCTCAATGGGGCTACTGTTGTAGCAGCTTTGATTGCTAACCCAAGGAGGAAGCTGGTTTGG
 GCCATAAGTGTACCATGATAGGTGTCGTTCTCTTTGATTTTGTGCCGACTTCATTGATGGGCCCATCA
 AAGCCTACTTATTTGATGTCTGCTCCCATCAGGACAAGGAGAAGGGCTCCACTACCATGCCCTCTTAC
 AGGTTTTGGAGGTGCCCTGGGTACCTTTTGGGTGCTATAGACTGGGCCATCTGGAGCTGGGAAGACTG
 TTGGGTACAGAATCCAGGTGATGTTCTTCTTCTGCTGATTGGTGTCACTTTGTGTTTTACTGTTTCATC
 TGTGCAGTATCTCTGAAGCCCACTTACAGAGGTTGCAAGGGCATTCCCCACAGCAAAACCCCTCAGGA
 CCCTCCATTGTATCAGATGGAATGTACGAGTATGGTCTATCGAGAAAGTTAAAAATGGTTACGTAAAT
 CCAGAGCTGGCAATGCAGGGAGCAAAAAACAAAATCATGCTGAACAGACTCGCAGGGCAATGACATTAA
 AGTCACTGCTGAGAGCACTGGTGAACATGCCTCCTCACTACCGCTACCTTTGCATCAGCCACCTCATTGG
 ATGGACGGCCTTCTGTCCAACATGCTGTTCTTACAGATTTTATGGGCCAGATTGTGTACCGCGGGGAT
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 TCTGCATCAACTCCGTGTTTTCTCACTTTATTCTTACTTTTACAGAAAGTTTGGTATCCTACATTGGATT
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 GTCTACTCCACCCTGGTCTGTGACGCTGTTTGGTGTAAATGTCCAGCACCCCTGTACACTGTGCCCTTTA
 ACCTCATTACTGAGTACCACCGCAGGAAGAAAAGGAGAGGCAGGCCCCAGGAGGGGACCCAGACAA
 CAGCGTGAGAGGAAGGCATGGATGCGCCACCCTCACATGCATGGTGCAGCTGGCTCAGATCCTGGTC
 GGAGGTGGCCTGGGCTTTCTGGTCAACACAGCCGGGACCGTTGTCGTCGTGGTGATCACAGCGTCTCGCG
 TGGCACTGATAGGCTGTTGCTTGTGCTCTCTTTGTTAGATATGTGGAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

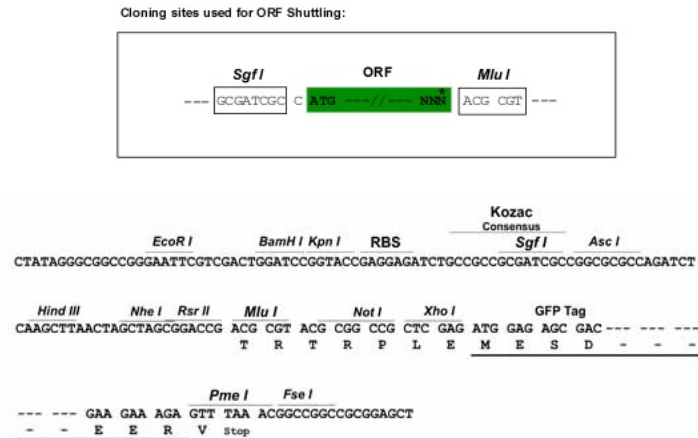
Protein Sequence: >RG219103 representing NM_016180
 Red=Cloning site Green=Tags(s)

MGSNSGQAGRHIYKSLADDPFDSVEPPKRPTSRLLIMHSMAMFGREFCYAVEAAYVTPVLLSVGLPSSLY
 SIVWFLSPILGFLLPVVGSASDHCRSRWRRRPYILTLGVMMVLGMALYLNATVVAALIANPRRKLW
 AISVTMIGVVLFDFAADFIDGPIKAYLFDVCSHQDKEKGLHYHALFTGFGGALGYLLGAIDWAHLELGR
 LGTEFQVMFFF SALVLTLCFTVHLCSISEAPL TEVAKGIPPQQTQDPPLSSDGMYYEYSIEKVKNYVN
 PELAMQGAKNKHAETRRAMTLKSLRLALVNMPHYRYLCISHLIGWTAFLSNMLFFDFMGQIVYRGD
 PYSAHNSTEFLLIYERGVEVGCWGFINSVFSSLYSYFQKVLVSYIGLKGLYFTGYLLFGLGTGFI
 VYSTLVLCSLFGVMSSTLYTVPFNLITEYHREEKERQQAPGGDPDNSVRGKGMDCATLTCMVQLAQILV
 GGGLGFLVNTAGTVVVVVITASAVALIGCCFVALFVRYVD

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016180

ORF Size: 1590 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.

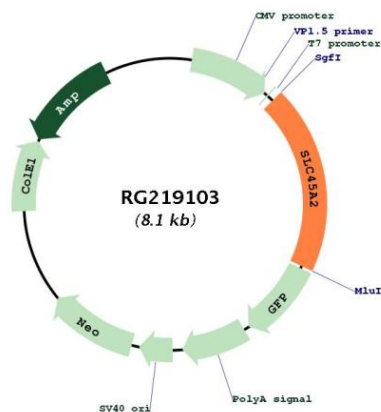
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_016180.3](#), [NP_057264.3](#)

RefSeq Size: 1734 bp

RefSeq ORF:	1593 bp
Locus ID:	51151
UniProt ID:	Q9UMX9
Cytogenetics:	5p13.2
Protein Families:	Druggable Genome, Transmembrane
Gene Summary:	This gene encodes a transporter protein that mediates melanin synthesis. The protein is expressed in a high percentage of melanoma cell lines. Mutations in this gene are a cause of oculocutaneous albinism type 4, and polymorphisms in this gene are associated with variations in skin and hair color. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]

Product images:



Circular map for RG219103