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Product datasheet for RG214466

SLC16A2 (NM_006517) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SLC16A2
Synonyms:	AHDS; DXS128; DXS128E; MCT 7; MCT7; MCT 8; MCT8; MRX22; XPCT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG214466 representing NM_006517
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGAGAGGAGGAGGGGGGTTGGACGTGGGAGGAGGAGGAGAGGGCTCGAGGGACCGTCTGTCGCGGG
ACGGGCTGGCCAGCTGGGGCGCGGAGCCTGGAGGAGGAGGCAGCGGCAGCGGCAGCAGCAGCCCTCCGAG
CAGCAGCAGCTGCAGCAGCAGAAACAAGTACCAGCCACAAAGCGGCTCCTCTGGCCCAAGCAGCCACAGT
CCCCCCGCCGCGATGGCGCTGCAAAGCCAGGCGAGCGAGGAAGCAAAGGGGCCCTGGCAGGAGGCAGACC
AGGAACAGCAGGAGCCGGTGGGTAGCCCAGAGCCGGAGTCTGAGCCGGAGCCTGAGCCCGAGCCCGAGCC
CGTGCCAGTGCCCCCGCCCGAGCCCCAGCCGGAGCCCCAGCCCCTACCGGACCCCGCACCCCTGCCGGAG
CTGGAGTTCGAGTCCGAGCGGGTGCACGAACCCGAGCCCACGCCTACGGTAGAGACCCGCGGCACCGCGC
GCGGCTTCCAGCCTCCCGAAGGTGGCTTCGGCTGGGTGGTGGTGTTCGCTGCCACCTGGTGCAACGGCTC
CATCTTCGGCATCCATAACTCTGTCGGGATCCTCTACTCCATGCTGCTAGAGGAGGAAAAGGAAAAAAAT
CGCCAAGTGGAGTTCCAAGCAGCATGGGTCGGAGCCCTCGCGATGGGTATGATCTTCTTCTGTTCTCCCA
TTGTGAGTATATTCACTGACCGTTTGGGCTGCCGAATCACAGCAACCGCGGGGGCTGCCGTTGCTTTCAT
TGGCCTCCATACCAGCTCCTTCACCAGCTCCCTAAGCCTGCGCTACTTCACCTACGGGATTCTCTTTGGT
TGTGGCTGTTCCTTCGCCTTTCAGCCATCCCTCGTCATCCTGGGCCACTACTTTCAACGCCGCCTGGGTC
TGGCCAATGGTGTGGTGTCTGCTGGGAGTAGCATTTTCTCCATGTCCTTCCCCTTCCTCATCAGAATGCT
GGGGGATAAGATCAAGCTGGCCCAAACCTTCCAGGTGCTGAGTACCTTCATGTTTGTTCTTATGCTGCTT
TCACTCACCTACCGGCCCCTCCTGCCCAGCTCCCAGGACACCCCAAGCAAGAGAGGTGTCCGCACCCTGC
ACCAGCGCTTTCTGGCTCAGCTCAGGAAGTACTTCAACATGCGAGTGTTCCGCCAACGCACTTACCGCAT
CTGGGCCTTCGGAATTGCTGCTGCTGCCCTTGGCTACTTTGTTCCCTATGTACACCTGATGAAGTATGTG
GAGGAGGAGTTCTCAGAAATCAAGGAGACCTGGGTGCTCTTGGTGTGTATTGGGGCTACCTCAGGCCTTG
GGCGTCTTGTGTCAGGCCACATCAGTGACTCCATCCCTGGACTTAAGAAGATCTACTTGCAGGTCCTTTC
CTTCCTGCTCCTGGGCCTGATGTCCATGATGATTCCCCTGTGCCGGGACTTCGGGGGCCTTATCGTCGTC
TGTCTTTTCCTGGGCCTTTGCGATGGCTTCTTCATCACCATCATGGCCCCCATTGCATTTGAGCTGGTGG
GCCCAATGCAGGCCTCACAGGCCATTGGCTACCTCCTGGGCATGATGGCCCTGCCAATGATTGCTGGGCC
CCCCATTGCAGGCCTACTCCGCAACTGTTTTGGGGACTACCATGTGGCCTTCTACTTTGCCGGTGTGCCC
CCCATCATCGGGGCTGTAATCCTCTTCTTCGTCCCTCTGATGCATCAAAGGATGTTCAAGAAAGAGCAGA
GAGATTCCAGCAAGGATAAGATGTTGGCCCCTGACCCAGACCCCAATGGGGAGCTACTGCCGGGCTCCCC
CAACCCTGAGGAACCAATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

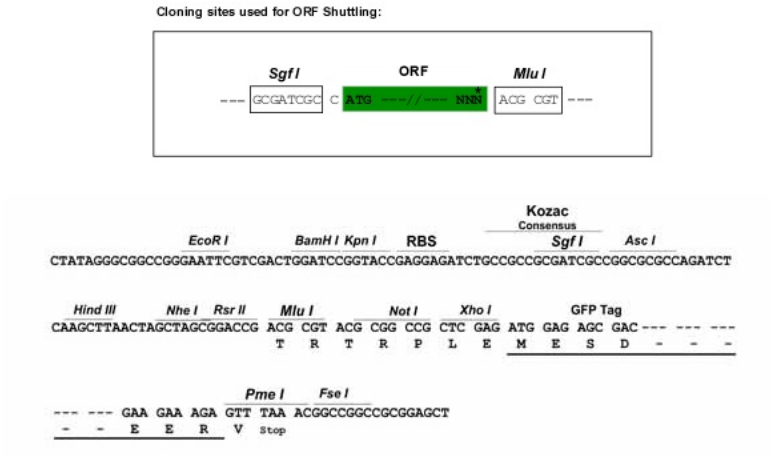
>RG214466 representing NM_006517
Red=Cloning site Green=Tags(s)

MGRGGGGLDVGGGGEGSRDRLSRDGLASWGAEPGGGGSGSGSSSPPSSSSCSSRNKYQPQSGSSGPSSHS
PPAAMALQSQASEEAKGPWQEADQEQQEPVGSPEPESEPEPEPEPEPVPVPPPEPQPEPQPLPDPAPLPE
LEFESERVHEPEPTPTVETRGTARGFQPPEGGFGWVVVFAATWCNGSIFGIHNSVGILYSMLLEEEKEKN
RQVEFQAAWVGALAMGMIFFCSPIVSIFTDRLGCRITATAGAAVAFIGLHTSSFTSSLSLRYFTYGILFG
CGCSFAFQPSLVILGHYFQRRLGLANGVVSAGSSIFSMSFPFLIRMLGDKIKLAQTFQVLSTFMFVLMLL
SLTYRPLLPSSQDTPSKRGVRTLHQRFLAQLRKYFNMRVFRQRTYRIWAFGIAAAALGYFVPYVHLMKYV
EEEFSEIKETWVLLVCIGATSGLGRLVSGHISDSIPGLKKIYLQVLSFLLLGLMSMMIPLCRDFGGLIVV
CLFLGLCDGFFITIMAPIAFELVGPMQASQAIGYLLGMMALPMIAGPPIAGLLRNCFGDYHVAFYFAGVP
PIIGAVILFFVPLMHQRMFKKEQRDSSKDKMLAPDPDPNGELLPGSPNPEEPI

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006517

ORF Size: 1839 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

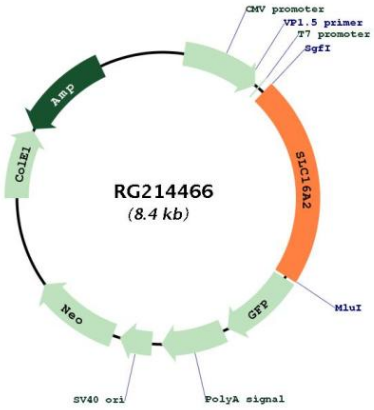
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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_006517.3
RefSeq Size:	4401 bp
RefSeq ORF:	1620 bp
Locus ID:	6567
UniProt ID:	P36021
Cytogenetics:	Xq13.2
Protein Families:	Transmembrane
Gene Summary:	This gene encodes an integral membrane protein that functions as a transporter of thyroid hormone. The encoded protein facilitates the cellular importation of thyroxine (T4), triiodothyronine (T3), reverse triiodothyronine (rT3) and diidothyronine (T2). This gene is expressed in many tissues and likely plays an important role in the development of the central nervous system. Loss of function mutations in this gene are associated with psychomotor retardation in males while females exhibit no neurological defects and more moderate thyroid-deficient phenotypes. This gene is subject to X-chromosome inactivation. Mutations in this gene are the cause of Allan-Herndon-Dudley syndrome. [provided by RefSeq, Mar 2012]

Product images:



Circular map for RG214466