

Product datasheet for MR224346

Slc25a44 (NM_178696) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: Slc25a44 (NM_178696) Mouse Tagged ORF Clone
 Tag: Myc-DDK
 Symbol: Slc25a44
 Synonyms: 6720482A19; B430110G05Rik
 Mammalian Cell Selection: Neomycin
 Vector: pCMV6-Entry (PS100001)
 E. coli Selection: Kanamycin (25 ug/mL)
 ORF Nucleotide Sequence: >MR224346 representing NM_178696
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCCCGGGACTCTGAATTGGCCGTGCAAGAGCCTGACAGAAGGTCTCCGGGCACAATGGAGGACAAAC
 GGAACATCCAGATCATCGAGTGGGAGCACCTGGACAAGAAGAAGTTCTATGTGTTTGGTGTGCTATGAC
 AATGATGATCAGGGTCAAGCGTGTACCCGTTACCCTCATCCGCACCCGCTGCAGGTCCAGAAGGGCAAG
 AGCCTCTACCACGGGACCTTCGATGCCTTTGTCAAGATCCTGCGAGCAGATGGAGTGGCGGGCCTCTACC
 GGGGTTCTGGTCAACACCTTCACACTCATCTCCGGCCAGTGTATGTCACCCTTACGAGCTCACCCG
 GAAGTTTGTGGCAGACTACAGCCAGAGTAACACAGTCAAATCACTCGTAGCCGGGGCTCGGCCTCCCTT
 GTGGCCAGAGCATCACGGTGCCGATCGATGTTGTCTCCCAACATCTGATGATGCAGCGGAAGGGTGAGA
 AAATGGGTTCGCTTCCAAGTGCACGGGAACCTAGAGGGACAAGGGTGATTGCCTTTGGCCAGACTAAGGA
 CATCATCAGGCAGATCCTTCGGGCTGACGGTCTCCGAGGCTTCTACCGGGCTATGTGGCCTCGTGCTA
 ACGTACATCCCAAACAGTGTCTGGTGGCCCTTCTACCACTTCTATGCAGAGCAGCTGTCCGGCCTGT
 GCCCTCAGGAGTGCCTCACATTGTCTTTCAAGCCATCTCTGGGCCCTGGCTGCAGCCACTGCCTCCAT
 CCTCACCATCCCATGGATGTATCAGAACCCTGTGCAGGTTGAAGGCAAGAGCTCCATCGTCTGACC
 TTCAGGCAGTGTGGCAGAGGAGGGCCTTGGGGCCTCATGAAGGGCCTCTCGGCAAGAATCATCTCGG
 CTACACCCTCCACCATCGTCATCGTGGTGGGCTACGAGAGCCTCAAGAAGCTCAGCCTGCCACCTGAGCT
 GGTGGACTCGAGACTGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR224346 representing NM_178696
 Red=Cloning site Green=Tags(s)

MPGDSELAVQEPDRRSPGTMEDKRNIQIIIEWEHLDKKKFYVFGVAMTMMIRVSVYPFTLIRTRLQVQKGG
 SLYHGTFDAFVKILRADGVAGLYRGFLVNTFTLISGQCYVTTYELTRKFVADYSQSNTVKSLVAGGSASL
 VAQSITVPIDVVSQHLMMQRKGEKMGRFQVHGNLEGGQVIAFGQTKDIIIRQILRADGLRGFYRGYVASLL
 TYIPNSAVWWPFYHFYAEQLSRLCPQCEPHIVFQAI SGPLAAATASILINPMDVIRTRVQVEGKSSIVLT
 FRQLMAEEGPWGLMKGLSARIISATPSTIVVGVYELKKLSLRPELVDSRHW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9020_d12.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_178696

ORF Size: 999 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_178696.5](#), [NP_848811.2](#)

RefSeq Size: 3584 bp

RefSeq ORF: 1002 bp

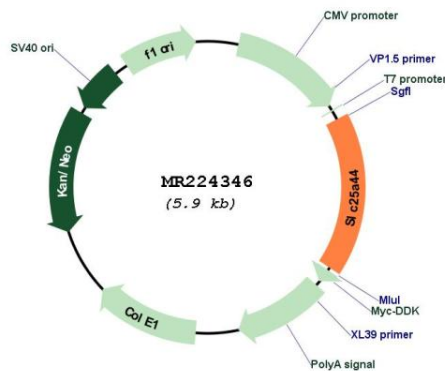
Locus ID: 229517

Cytogenetics: 3 F1

MW: 37.8 kDa

Gene Summary: Mitochondrial solute transporter which transports branched-chain amino acid (BCAA; valine, leucine and isoleucine) into mitochondria in brown adipose tissue (BAT) (PubMed:31435015). BAT is involved in BCAA catabolism and actively utilizes BCAA in the mitochondria for thermogenesis (PubMed:31435015).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR224346