

Product datasheet for RC208949

Adenine Nucleotide Translocator 2 (SLC25A5) (NM_001152) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Adenine Nucleotide Translocator 2 (SLC25A5) (NM_001152) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC25A5
Synonyms:	2F1; AAC2; ANT2; T2; T3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208949 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGACAGATGCCGCTGTGTCTTCGCAAGGACTTCTGGCAGGTGGAGTGGCCGAGCCATCTCCAAGA
CGGCGGTAGCGCCATCGAGCGGGTCAAGCTGCTGCTGCAGGTGCAGCATGCCAGCAAGCAGATCACTGC
AGATAAGCAATACAAAGGCATTATAGACTGCGTGGTCCGTATCCCAAGGAGCAGGGAGTTCTGTCCTT
TGGCGCGGTAACCTGGCCAATGTCATCAGATACTCCCCACCCAGGCTCTTAACCTCGCCTTCAAAGATA
AATACAAGCAGATCTTCTGGGTGGTGTGGACAAGAGAACCCAGTTTTGGCGCTACTTTGCAGGGAATCT
GGCATCGGGTGGTCCGCGAGGGGCCACATCCCTGTGTTTTGTGTACCCTCTTGATTTGCCCGTACCCGT
CTAGCAGCTGATGTGGTAAAGCTGGAGCTGAAAGGGAATCCGAGGCCTCGGTGACTGCCTGGTTAAGA
TCTACAAATCTGATGGGATTAAGGGCCTGTACCAAGGCTTTAACGTGTCTGTGCAGGGTATTATCATCTA
CCGAGCCGCTACTTCGGTATCTATGACTGCAAAGGGAATGCTTCCGGATCCCAAGAACACTCACATC
GTCATCAGCTGGATGATCGCACAGACTGCTACTGCTGTTGCCGGTTGACTTCTATCCATTTGACACCG
TTCGCCCGCATGATGATGCAGTCAGGGCGCAAAGGAAGTACATCATGTACACAGGCACGCTTGACTG
CTGGCGGAAGATTGCTCGTGTGATGAAGGAGGCAAAGCTTTTTCAAGGGTGCATGGTCCAATGTTCTCAGA
GGCATGGTGGTCTTTGTGCTTGTCTTGTATGATGAAATCAAGAAGTACACA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208949 protein sequence
 Red=Cloning site Green=Tags(s)

MTDAAVSFAKDFLAGGVAAAISKTAVAPIERVKLLLQVQHASKQITADKQYKGIIDCVVRIPKEQGVLSF
 WRGNLANVIRYFPTQALNFAFKDKYKQIFLGGVDKRTQFWRYFAGNLASGGAAGATSLCFVYPLDFARTR
 LAADVKGAGAEREFRLGDCLVKIYKSDGIKGLYQGFNVSVQGI IYRAAYFGIYDTAKGMLPDPKNTHI
 VISWMIAQTVTAVAGLTSYPFDTVRRRMMMQSGRKGTDIMYTGTLDCWRK IARDEGGKAFKGAWSNVL R
 GMGGAFVLVLYDEIKKYT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

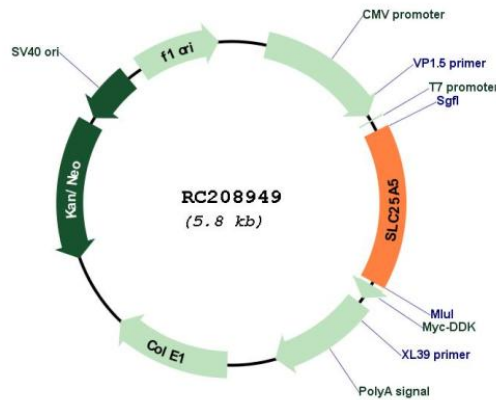
Chromatograms: https://cdn.origene.com/chromatograms/mk6213_a09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



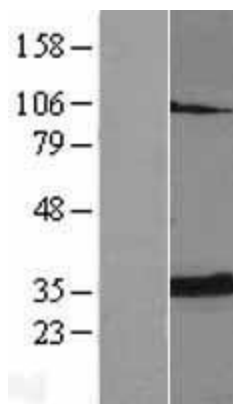
Plasmid Map:



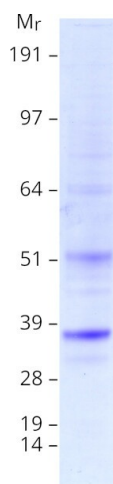
ACCN: NM_001152

ORF Size:	894 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:	<ol style="list-style-type: none">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_001152.1 , NP_001143.1
RefSeq Size:	1351 bp
RefSeq ORF:	897 bp
Locus ID:	292
UniProt ID:	P05141
Cytogenetics:	Xq24
Domains:	mito_carr
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Calcium signaling pathway, Huntington's disease, Parkinson's disease
MW:	32.9 kDa
Gene Summary:	This gene is a member of the mitochondrial carrier subfamily of solute carrier protein genes. The product of this gene functions as a gated pore that translocates ADP from the cytoplasm into the mitochondrial matrix and ATP from the mitochondrial matrix into the cytoplasm. The protein forms a homodimer embedded in the inner mitochondria membrane. Suppressed expression of this gene has been shown to induce apoptosis and inhibit tumor growth. The human genome contains several non-transcribed pseudogenes of this gene.[provided by RefSeq, Jun 2013]

Product images:



Western blot validation of overexpression lysate (Cat# [LY420098]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208949 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SLC25A5 protein (Cat# [TP308949]). The protein was produced from HEK293T cells transfected with SLC25A5 cDNA clone (Cat# RC208949) using MegaTran 2.0 (Cat# [TT210002]).