

Product datasheet for **RG208949**

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:	TurboGFP
Symbol:	Adenine Nucleotide Translocator 2
Synonyms:	2F1; AAC2; ANT2; T2; T3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG208949 representing NM_001152 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACAGATGCCGCTGTGTCTTCGCCAAGGACTTCTGGCAGGTGGAGTGGCCGAGCCATCTCCAAGA
CGGCGGTAGCGCCATCGAGCGGGTCAAGCTGCTGCTGCAGGTGCAGCATGCCAGCAAGCAGATCACTGC
AGATAAGCAATACAAAGGCATTATAGACTGCGTGGTCCGTATCCCAAGGAGCAGGGAGTTCTGTCCTTC
TGGCGCGGTAACCTGGCCAATGTCATCAGATACTCCCCACCCAGGCTCTTAACCTCGCCTTCAAAGATA
AATACAAGCAGATCTTCTGGGTGGTGTGGACAAGAGAACCCAGTTTTGGCGCTACTTTGCAGGGAATCT
GGCATCGGGTGGTCCCGCAGGGCCACATCCCTGTGTTTTGTGTACCCTCTTGATTTGCCCGTACCCGT
CTAGCAGCTGATGTGGTAAAGCTGGAGCTGAAAGGGAATTCGAGGCCTCGGTGACTGCCTGGTTAAGA
TCTACAAATCTGATGGGATTAAGGGCCTGTACCAAGGCTTTAACGTGTCTGTGCAGGGTATTATCATCTA
CCGAGCCGCTACTTCGGTATCTATGACTGCAAAGGGAATGCTTCCGGATCCCAAGAACACTCACATC
GTCATCAGCTGGATGATCGCACAGACTGCTACTGCTGTTGCCGGTTGACTTCTATCCATTTGACACCG
TTCGCCCGCATGATGATGCAGTCAGGGCGCAAAGGAAGTACATCATGTACACAGGCACGCTTGACTG
CTGGCGGAAGATTGCTCGTGATGAAGGAGGCAAAGCTTTTTCAAGGGTGCATGGTCCAATGTTCTCAGA
GGCATGGTGGTCTTTGTGCTTGTCTGTATGATGAAATCAAGAAGTACACA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG208949 representing NM_001152
Red=Cloning site Green=Tags(s)

MTDAAVSFAKDFLAGGVAAAISKTAVAPIERVKLLLQVQHASKQITADKQYKGIIDCVVRIPKEQGVLSF
 WRGNLANVIRYFPTQALNFAFKDKYKQIFLGGVDKRTQFWRYFAGNLASGGAAGATSLCFVYPLDFARTR
 LAADVKGAGAEREFRGLGDCLVKIYKSDGIKGLYQGFNVSVQGI I IYRAAYFGIYDTAKGMLPDPKNTHI
 VISWMIAQTVTAVAGLTSYPFDTVRRRMMMQSGRKGTDIMYTGTLDCWRK IARDEGGKAFKGAWSNVLR
 GMGGAFVLLVLYDEIKKYT

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



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:

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: 1225 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

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:



Circular map for RG208949