

Product datasheet for **RC216782**

TAT (NM_000353) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TAT (NM_000353) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TAT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC216782 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGACCCATACATGATTTCAGATGAGCAGCAAAGCAACCTCTCCTCAATTCTGGACGTGCATGTCAACG
 TTGGTGGGAGAAGCTCTGTGCCGGGAAAAATGAAAGGCAGAAAGGCCAGGTGGTCTGTGAGGCCCTCAGA
 CATGGCCAAGAAAACTTTCAACCCCATCCGAGCCATTGTGGACAACATGAAGGTGAAACCAATCCAAAC
 AAAACCATGATTTCCCTGTCCATTGGGGACCTACTGTGTTTGGAAACCTGCCTACAGACCTGAAGTTA
 CCCAGGCAATGAAAGATGCCCTGGACTCGGGCAAATAAATGGCTATGCCCCATCCATCGGCTTCTATC
 CAGTCGGGAGGAGATTGCTTCTTATTACCACTGTCCTGAGGCACCCCTAGAAGCTAAGGACGTCATTCTG
 ACAAGTGGCTGCAGCCAAGCTATTGACCTTTGTTAGCTGTGTTGGCCAACCCAGGGCAAACATCTGG
 TTCCAAGACCTGGTTTCTCTCTACAAGACTCTGGCTGAGTCTATGGGAATTGAGTCAAACCTACAA
 TTTGTTGCCAGAGAAATCTTGGGAAATTGACCTGAAACAACCTGGAATATCTAATTGATGAAAAGACAGCT
 TGCTCATTGTCAATAATCCATCAAACCCCTGTGGGTCACTGTTAGCAACGTCATCTTCAGAAGATTC
 TGGCAGTGGCTGCACGGCAGTGTGTCCCATCTTAGCTGATGAGATCTATGGAGACATGGTGTTCGGA
 TTGCAATATGAACCACTGGCCACCCTCAGCACCGATGTCCCATCTGTCTGTGGAGGGCTGGCCAAG
 CGCTGGCTGGTTCCTGGCTGGAGGTTGGGCTGGATCCTCATTGATGACCGAAGAGACATTTTTGGCAATG
 AGATCCGAGATGGGCTGGTGAAGCTGAGTCAGCGCATTTTGGGACCCTGTACCATTGTCCAGGGAGCTCT
 GAAAAGCATCCTATGTCGACCCCGGAGAGTTTTACCACAACACTCTGAGCTTCTCAAGTCCAATGCT
 GATCTCTGTTATGGGGCTTGGCTGCCATCCCTGGACTCCGGCCAGTCCGCCCTTCTGGGCTATGTACC
 TCATGGTTGGAATTGAGATGGAACATTTCCAGAATTTGAGAACGATGTGGAGTTCACGGAGCGGTTAGT
 TGCTGAGCAGTCTGTCCACTGCCTCCAGCAACGTGCTTTGAGTACCCGAATTTTCATCCGAGTGGTTCATC
 ACAGTCCCGAGGTGATGATGCTGGAGGCGTGCAGCCGGATCCAGGAGTTCTGTGAGCAGCACTACCATT
 GTGCTGAAGGCAGCCAGGAGGTGTGATAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216782 protein sequence
 Red=Cloning site Green=Tags(s)

MDPYMIQMSSKGNLSSILDVHVNVGGRSSVPGMKGRKARWSVRPSDMAKKTFFNPPIRAIVDNMVKPNPN
 KTMISLSIGDPTVFGNLPDPEVTQAMKDALDSGKYNGYAPSIGFLSSREEIASYYHCPEAPLEAKDVIL
 TSGCSQAIDLCLAVLANPGQNILVPRPGFSLYKTLAESMGIEVKLYNLLPEKSWEIDLKQLEYLIDEKTA
 CLIVNPNPNCGSVFSKRHLQKILAVAAARQCVPILADEIYGDMVFSACKYEPLATLSTDVPIILSCGGLAK
 RWLVPGWRLGWILIHDRRDIIFGNEIRDGLVKLSQRILGPCTIVQGALKSILCRTPGEFYHNTLSFLKSNA
 DLCY GALAAIPGLRPVPSGAMYL MVGIEMHFPEFENDVEFTERLVAEQSVHCLPATCFEYPNFI R VVI
 TVPEVMMLLEACSRIQEFCEQHYHCAEGSQEEDK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6469_g06.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_000353

ORF Size: 1362 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.

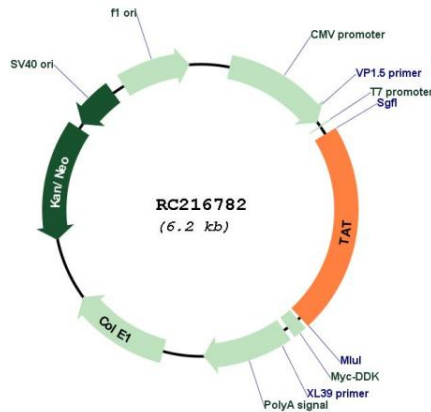
RefSeq: [NM_000353.3](#)
RefSeq Size: 2757 bp

RefSeq ORF: 1365 bp

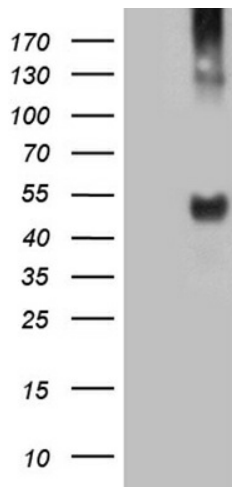
Locus ID: 6898

UniProt ID: [P17735](#)
Cytogenetics: 16q22.2
Domains: aminotran_1_2
Protein Families: Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS
Protein Pathways: Cysteine and methionine metabolism, Metabolic pathways, Phenylalanine, tyrosine and tryptophan biosynthesis, Phenylalanine metabolism, Tyrosine metabolism, Ubiquinone and other terpenoid-quinone biosynthesis
MW: 50.4 kDa
Gene Summary: This nuclear gene encodes a mitochondrial protein tyrosine aminotransferase which is present in the liver and catalyzes the conversion of L-tyrosine into p-hydroxyphenylpyruvate. Mutations in this gene cause tyrosinemia (type II, Richner-Hanhart syndrome), a disorder accompanied by major skin and corneal lesions, with possible cognitive disability. A regulator gene for tyrosine aminotransferase is X-linked. [provided by RefSeq, Jul 2008]

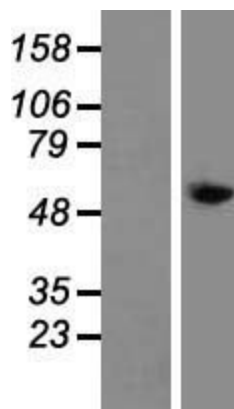
Product images:



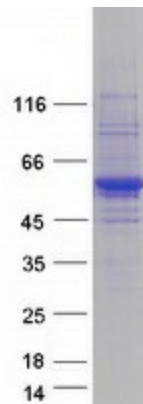
Circular map for RC216782



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TAT (Cat# RC216782, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TAT (Cat# [TA809923])(1:2000). Positive lysates [LY424771] (100ug) and [LC424771] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY424771]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216782 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TAT protein (Cat# [TP316782]). The protein was produced from HEK293T cells transfected with TAT cDNA clone (Cat# RC216782) using MegaTran 2.0 (Cat# [TT210002]).