

Product datasheet for **RG205697**

NTANI (NM_173474) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	NTANI
Synonyms:	PNAA; PNAD
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG205697 representing NM_173474
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCGCTGCTCGTCGAGGGGCGGCGAGTGCGGCTGCCGAGTCAGCCGGGACCTCGTCCGAGCCACC
CGCCTTTGGAGAAAGAGCCAGACTTCTCAGAGGTCAGTCTGTTCAACAAGTGGGACCCAGGGCCTTCT
GTATGTTAGCAAGAGAGCTTGCAGTGACCTCCCAAGGATGGCTCCATCTCCATTCTGGTTCTGAT
GATGCCACTACTTGTACATTGTGGTCTGAGGCACACAGGTAATGGGGCCACCTGCTTGACACATTGTG
ACGGAACCGACACCAAGCTGAGGTCCCCTTGATCATGAACTCCATAAAATCCTTTTCTGACCACGCTCA
ATGTGGAAGGCTGGAAGTACACCTTGTGGAGGCTTCAGTGACGACAGGCAGTTGTCAAAAACTCACT
CATCACTTCTTAGTGAATTTGACAGGCAAGAAGATGACATTCAGTTAGTGACATTATGTGTGACAGAAT
TAAATGACCGGGAAGAAAACGAAAACCACTTCCAGTAATATATGGCATTGCTGTCAACATTAAGACTGC
AGAGATTTACAGAGCATCCTTTCAAGATCGGGTCCGGAGGAGCAGCTTCGTGCTGCGCAACTTTAGCA
GGAGGACCAATGATTAGCATTTATGATGCAGAGACAGAACAACCTTCGTATAGGACCGTACTCCTGGACAC
CATTTCCACATGTGGATTTCTGGTTGCACCAAGATGACAAGCAAACTAGAGAATCTTTCCACTTCGCC
TCTGGCTGAGCCACCCACTTTGTTGAACATATTAGATCTACCTTGATGTTTTAAAAAACACCCATCT
CCAGCTCACACACTGTTTTCTGGAATAAAGCCCTACTCTACAAAAAATGAAGATGGCTTGTGGGAAA
AGATCTCTTCTCCAGGAAGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >RG205697 representing NM_173474
Red=Cloning site Green=Tags(s)

MPLLVEGRRVRLPQSAGDLVRAHPLEERARLLRGQSVQVGPQGLLYVQQRELAVTSPKDGSIILGSD
DATTCIHVVL RHTGNGATCLTHCDGTDTKAEVPLIMNSIKSFSDHAQCGRLEVHLVGGFSDDRQLSQKLT
HQLLSEFDRQEDDIHLVTLCTELNDREENENHFPVIYGI AVNIKTAEIYRASFDGRGPEEQLRAARTLA
GGPMISIIYDAETEQLRIGPYSWTFPHVDFWLHQDDKQILENLSTSPLAEPHFVEHIRSTLMFLKKHPS
PAHTLFSGNKALLYKKNEDGLWEKISSPGS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



CTATAGGGCGGCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGTCTAGTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---

HindIII NheI RsrII MluI NotI XhoI GFP Tag

T R T R P L E M E S D - - -

--- GAA GAA AGA GTT TAA ACGGCCGGCCGCGAGCT

- - E E R V Stop

ACCN: NM_173474

ORF Size: 930 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_173474.4](#)

RefSeq Size: 1137 bp

RefSeq ORF: 933 bp

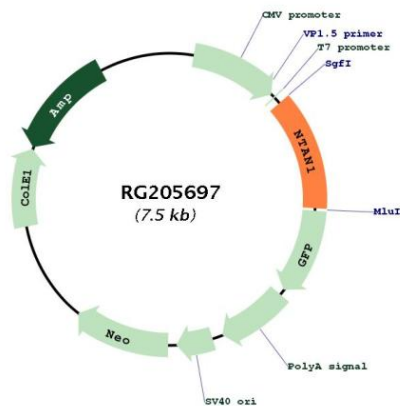
Locus ID: 123803

UniProt ID: [Q96AB6](#)

Cytogenetics: 16p13.11

Gene Summary: The protein encoded by this gene functions in a step-wise process of protein degradation through the N-end rule pathway. This protein acts as a tertiary destabilizing enzyme that deamidates N-terminal L-Asn residues on proteins to produce N-terminal L-Asp. L-Asp substrates are subsequently conjugated to L-Arg, which is recognized by specific E3 ubiquitin ligases and targeted to the proteasome. Pseudogenes of this gene are located on the long arms of chromosomes 8, 10 and 12. Alternative splicing results in multiple transcript variants that encode different protein isoforms. [provided by RefSeq, Jul 2012]

Product images:



Circular map for RG205697