

## Product datasheet for **RG226444**

### **NACA (NM\_001113203) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NACA (NM_001113203) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NACA
Synonyms:	HSD48; NAC-alpha; NACA1; skNAC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG226444 representing NM\_001113203  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCCCGCGAAGCCACAGAAACCGTCCCTGCTACAGAGCAGGAGTTGCCGCAGCCCCAGGCTGAGACAG  
 CTGTGCTACCTATGTCTTCAGCCTTGAGTGTCACTGCTGCCTTAGGGCAGCCTGGACCTACCTCCCCC  
 TCCTTGCTCTCCTGCCCAACAGTGCCTCTCTCAGCTGCTAACCCAGGCTTCCCCATTCCCTCCCCC  
 TCTACTATTGCCTCGACCCCTTTAGAAGTTCCTTTCCCCAGTCATCCTCTGGAACAGCCCTACCTTTGG  
 GAACTGCCCTGAAGCCCCAACCTTCTACCAACCTAATAGGGCCTCCCATCTCCCCAGCTGCCTTAGC  
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 GCCCTGGTCCCCACTCAGTTCAGAAGAGTTCTGCTTTCCACCTAACCTTCTTACTTCACCTCCTTCAG  
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 TCTTAATAAAGTTCCTCTGAGGTAGTCCCTAATCCAAAAGGCACCCCGCCCTCCATGTATAGTCAGT  
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 CACCCACAACCTACCTAGCCATCGCTTCCCTCAAGTCAAAGATACCACCATTTCTCAGTTCGTATTTTC  
 TCCAAAAACCCAGGAAGCCTCAGCCTGAAGGGCCTGTAGTCCACCTGCTGCCTTATCTTTTCAACT  
 CAGTCTCTTCTGTGGTGACCTCTTCTCAAAGACTGCGGGTCCCAACACCCCCCAGATTTTCCATTT  
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 GGAAAGTGTGACCCCTGCCGGGTGGCTCCCAACTGCCAAAGCAGCTGCCTTTGAGAAGTCTTCTCT  
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 AACACAGTAATGATATTGTAATGCGATTATGGAATTAACAATG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG226444 representing NM\_001113203  
 Red=Cloning site Green=Tags(s)

MPGEATETVPATEQELPQPQAEAVLPMSSALSVTAALGQPGPTLPPPCSPAPQQCPLSAANQASPFPPSP  
 STIASTPLEVFPFQSSSGTALPLGTAPEAPTFLPNLIGPPISPAALALASPMIAPTLKGTSPSSAPLALV  
 ALAPHSVQKSSAFPPNLLTSPPSVAVAESGVSITLSAPIAPSEPKTNLNKVPSEVVPNPKGTPSPPCIVS  
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 KPESASVSAAPSPVSLPLAPSPVPTLPPKQQLPSSPGLVLESPSKPLAPADEDELLPLIPPEISGGV  
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 NNSNDIVNAIMELTM

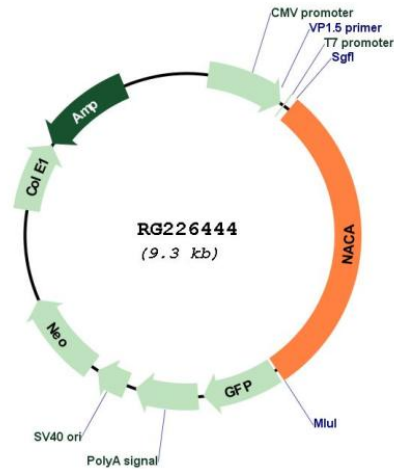
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_001113203

**ORF Size:** 2775 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\\_001113203.3](#)

**RefSeq Size:** 3191 bp

**RefSeq ORF:** 2778 bp

**Locus ID:** 4666

**UniProt ID:** [Q13765](#)

**Cytogenetics:** 12q13.3

**Protein Families:** Druggable Genome, Transcription Factors

**Gene Summary:** This gene encodes a protein that associates with basic transcription factor 3 (BTF3) to form the nascent polypeptide-associated complex (NAC). This complex binds to nascent proteins that lack a signal peptide motif as they emerge from the ribosome, blocking interaction with the signal recognition particle (SRP) and preventing mistranslocation to the endoplasmic reticulum. This protein is an IgE autoantigen in atopic dermatitis patients. Alternative splicing results in multiple transcript variants, but the full length nature of some of these variants, including those encoding very large proteins, has not been determined. There are multiple pseudogenes of this gene on different chromosomes. [provided by RefSeq, Feb 2016]