

## Product datasheet for **RG202749**

### NFYB (NM\_006166) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** NFYB (NM\_006166) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** NFYB  
**Synonyms:** CBF-A; CBF-B; HAP3; NF-YB  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG202749 representing NM\_006166  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGACAATGGATGGTGACAGTTCTACAACAGATGCTTCTCAACTAGGAATCTCTGCAGACTATATTGGAG  
 GAAGTCATTATGTTATACAGCCTCATGATGATACTGAGGACAGCATGAATGATCATGAAGACACAAATGG  
 TTCAAAGAAAGTTTCAGAGAACAAGATATATCTTCCAATAGCAAACGTGGCTAGGATAATGAAAAAT  
 GCCATACCTCAAACGGGAAAGATTGCAAAGATGCCAAAGAATGTGTTCAAGAATGTGTAAGTGAGTTCA  
 TCAGTTTTATAACATCTGAAGCAAGTAAAGGTGCCATCAAGAGAAACGAAAACAATCAATGGAGAAGA  
 TATTCTCTTTGCTATGTCTACTTTAGGCTTTGACAGTTATGTGGAACCTCTGAAATTATACCTTCAGAAA  
 TTCAGAGAGGCTATGAAAGGAGAAAAGGGAATTGGTGGAGCAGTCACAGCTACAGATGGACTAAGTGAAG  
 AGCTTACAGAGGAGGCATTTACTAACAGTTACCAGCTGGCTTAATAACCACAGACGGTCAACAACAAAA  
 TGTTATGGTTTACACAACATCATATCAACAGATTTCTGGTGTTCAGCAAATTCAGTTTTCA

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG202749 representing NM\_006166  
 Red=Cloning site Green=Tags(s)

MTMDGDSSTTDASQLGISADYIGGSYHYVIQPHDDTEDSMNDHEDTNGSKESFREQDIYLPANVARIMKN  
 AIPQTGKIAKDAKECVQECVSEFISFITSEASERCHQEKRKTINGEDILFAMSTLGFDSYVEPLKLYLQK  
 FREAMKGEKIGGAVTATDGLSEELTEEAFTNQLPAGLITTDGQQQNMVYTTSSYQQISGVQIQFS

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



[View online »](#)

**Cloning Scheme:**


**ACCN:** NM\_006166

**ORF Size:** 621 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\\_006166.4](#)

**RefSeq Size:** 3482 bp

**RefSeq ORF:** 624 bp

**Locus ID:** 4801

**UniProt ID:** [P25208](#)

**Cytogenetics:** 12q23.3

**Domains:** CBFD\_NFYB\_HMF

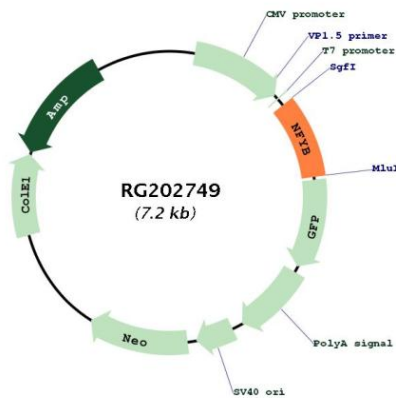
**Protein Families:** Transcription Factors

**Protein Pathways:** Antigen processing and presentation

**Gene Summary:**

The protein encoded by this gene is one subunit of a trimeric complex, forming a highly conserved transcription factor that binds with high specificity to CCAAT motifs in the promoter regions in a variety of genes. This gene product, subunit B, forms a tight dimer with the C subunit, a prerequisite for subunit A association. The resulting trimer binds to DNA with high specificity and affinity. Subunits B and C each contain a histone-like motif. Observation of the histone nature of these subunits is supported by two types of evidence; protein sequence alignments and experiments with mutants. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG202749