

## Product datasheet for **RG220508**

### **NBPF14 (NM\_015383) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NBPF14 (NM_015383) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NBPF14
Synonyms:	DJ328E19.C1.1; NBPF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG220508 representing NM\_015383  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCTGAGGAATGAGCGACAGTTCAAGGAGGAGAAGCTTGCAGAGCAGCTCAAGCAAGCTGAGGAGCTCA  
 GGCAATATAAAGTCTGTTCACGCTCAGGAACGAGAGCTGACCCAGTTAAGGGAGAAGTTGCGGGAAGG  
 GAGAGATGCCTCCCGCTCATTGAATGAGCATCTCCAGGCCCTCCTCACTCCGGATGAGCCGACAAGTCC  
 CAGGGGCAGGACCTCCAAGAACAGCTGGCTGAGGGGTGTAGACTGGCACAGCACCTTGCCAAAAGCTCA  
 GCCCAGAAAATGACAACGATGACGATGAAGATGTTCAAGTTGAGGTGGCTGAGAAAAGTGCAGAAAATCGTC  
 TGCCCCCAGGGAGATGCAGAAGGCTGAAGAAAAGGAAGTCCCTGAGGACTCACTGGAGGAATGTGCCATC  
 ACTTGTTCAAATAGCCATGGCCCTTATGACTCCAACCAGCCACATAGGAAAACAAAATCACATTTGAGG  
 AAGACAAAGTCGACTCAACTCTCATTGGCTCATCTCTCATGTTGAATGGGAGGATGCTGTACACATTAT  
 TCCAGAAAATGAAAGTGATGATGAGGAAGAGGAAGAAAAGGACCAGTGTCTCCAGGAATCTGCAGGAG  
 TCTGAAGAGGAGGAAGTCCCCCAGGAGTCTGGGATGAAGGTTATTCGACTCTCTCAATTCCTCCTGAAA  
 TGTTGGCCTCGTACAAGTCTTACAGCAGCACATTTCACTCATTAGAGGAACAGCAAGTCTGCATGGCTGT  
 TGACATAGGCAGACATCGGTGGGATCAAGTGAAAAAGGAGGACCAGAGGCAACAGGTCCCAGGCTCAGC  
 AGAGAGCTGCTGGATGAGAAAAGGCGCTGAAGTCTTGACGAGCTCACTGGATAGATGTTATTCAACTCCTT  
 CAGGTTGTCTTGAAGTACTGACTCATGCCAGCCCTACAGAAGTGCCTTTTACGTATTGGAGCAACAGCG  
 TGTTGGCTTGCTGTTAACATGGATGAAATTGAAAAGTACCAAGAAGTGGAGAAGACCAAGACCCATCA  
 TGCCCCAGGCTCAGCAGGGAGCTGCTGGATGAGAAAAGCCTGAAGTCTTGACGAGCTCACTGGGTAGAT  
 GTTATTGACTCCTTCAGGTTATCTTGAAGTGCCTGACTTAGGCCAGCCCTACAGCAGTGTGTTACTC  
 ATTTGGAGGAACAGTACCTTGGCTTGGCTCTTGACGTGGACAGAATTAAGGACCAAGAAGAGGAAAGAA  
 GACCAAGGCCACCATGCCCCAGGCTCAGCAGGGAGCTGCTGGAGGTAGTAGAGCCTGAAGTCTTGACAGG  
 ACTCACTGGATAGATGTTATTCAACTCCTTCCAGTTGTCTTGAACAGCCTGACTCCTGCCAGCCCTATGG  
 AAGTTCCTTTTATGCATTGGAGGAAAAGCATGTTGGCTTTTCTTGGAGTGGGAGAAAATGAAAAGAAG  
 GGGAAAGGGGAAGAAAAGAAGGGGAAGAAGATCAAAGAAGGAAAGAAGGGGAAGAAAAGAAGGGGAAG  
 AAGATCAAACCCACCATGCCCCAGGCTCAGCAGGGAGCTGCTGGATGAGAAAAGGCGCTGAAGTCTTGCA  
 GGACTCACTGGATAGATGTTATTCAACTCCTTCAGGTTGTCTTGAAGTACTGACTCATGCCAGCCCTAC  
 AGAAGTGCCTTTTACATATTGGAGCAACAGCGTGTGGCTTGGCTGTTGACATGGATGAAATTGAAAAGT  
 ACCAAGAAGTGGAGAAGACCAAGACCCATCATGCCCCAGGCTCAGCGGGGAGCTGTTGGATGAGAAAGA  
 GCCTGAAGTCTTGACAGGAGTCACTGGATAGATGCTATTCAACTCCTTCAGGTTGTCTTGAAGTACTGAC  
 TCATGCCAGCCCTACAGAAGTGCCTTTTACATATTGGAGCAACAGCGTGTGGCTTGGCTGTTGACATGG  
 ATGAAATTGAAAAGTACCAAGAAGTGGAGAAGACCAAGACCCATCATGCCCCAGGCTCAGCAGGGAGCT  
 GCTGGATGAGAAAAGCCTGAAGTCTTGACGAGCTCACTGGGTAGATGTTATTGACTCCTTCAGGTTAT  
 CTTGAACTGCCTGACTTAGGCCAGCCCTACAGCAGTGTGTTACTCATTGGAGGAACAGTACCTTGGCT  
 TGGCTCTTGACGTGGACAGAATTAAGGACCAAGAAGGGAAGAAGACCAAGGCCACCATGCCCCAG  
 GCTCAGCAGGGAGCTGCTGGAGGTAGTAGAGCCTGAAGTCTTGACGAGCTCACTGGATAGATGTTATTCA  
 ACTCCTTCAGTTGTCTTGAACAGCCTGACTCCTGCCAGCCCTATGGAAGTTCCTTTTATGCATTGGAGG  
 AAAAATGTTGGCTTTTCTCTTGGAGTGGGAGAAATTGAAAAGAAGGGGAAGGGGAAGAAAAGAAGGGG  
 AAGAAGATCAAAGAAGGAAAGAAGAAGGGGAAGAAAAGAAGGGGAAGAAGATCAAACCCACCATGCCCC  
 AGGCTCAACAGCATGCTGATGGAAGTGGAAAGAGCCTGAAGTCTTGACGAGCTCACTGGATATATGTTATT  
 CGACTCCGTCAATGTACTTTGAACTACCTGACTCATTCCAGCACTACAGAAGTGTGTTTACTCATTGGA  
 GGAAGAGCATATCAGCTTCGCCCTTACGTGGACAATAGGTTTTTTACTTTGACGGTGACAAGTCTCCAC  
 CTGGTGTCCAGATGGGAGTCATATCCACAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG220508 representing NM\_015383  
 Red=Cloning site Green=Tags(s)

MLRNERQFKEEKLAEQLKQAEELRQYKVLVHAQERELTQLREKLREGRDASRSLNEHLQALLTPDEPKS  
 QGQDLQEQLAEGCRLAQHLVQKLSPENDNDDDEDVQVEVAEKVQKSSAPREMKAEEKEVPEDSLEECAL  
 TCSNSHGYPYDSNQPHRKTKITFEEDKVDSTLIGSSSHVWEDAVHIIPENESDDEEEEEKGPVSPRNLQE  
 SEEEVQPQESWDEGYSTLSIPPEMLASYKSYSSTFHSLEEQQVCMVDIGRHRWDQYKKEDHEATGPRLS  
 RELLDEKGPEVLQDSLDRCYSTPSGCLELTDSCQPYRSFYVLEQQRVGLAVNMDEIEKYQEVEEDQDPS  
 CPRLSRELLDEKEPEVLQDSLGRCYSTPSGYLELPLDGGQPYSSAVYSLEEQYLGLALDVDRIKKDQEEEE  
 DQGPPCPRLSRELLEVEPEVLQDSLDRCYSTPSSCLEQPDSCQPYGSSFYALEEKHVGFSLDVGEIEKK  
 GKGGKRRGRRSKERRRRGRKEGEDQNPPCPRLSRELLDEKGPEVLQDSLDRCYSTPSGCLELTDSCQPY  
 RSFYIILEQQRVGLAVDMDEIEKYQEVEEDQDPSCPRLSGELLDEKEPEVLQESLDRCYSTPSGCLELTD  
 SCQPYRSFYIILEQQRVGLAVDMDEIEKYQEVEEDQDPSCPRLSRELLDEKEPEVLQDSLGRCYSTPSGY  
 LELPLDGGQPYSSAVYSLEEQYLGLALDVDRIKKDQEEEEEDQGPPCPRLSRELLEVEPEVLQDSLDRCY  
 TPSSCLEQPDSCQPYGSSFYALEEKHVGFSLDVGEIEKKGKGGKRRGRRSKERRRRGRKEGEDQNPPCP  
 RLNSMLMEVEEPEVLQSLDICYSTPSMYFELPDSFQHYRSVFYSFEEHHISFALYVDRFFTLTSLH  
 LVFQMGVIFPQ

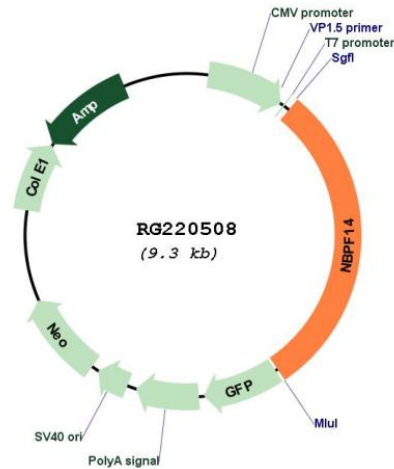
TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_015383

**ORF Size:** 2763 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\\_015383.1](#), [NP\\_056198.1](#)

**RefSeq Size:** 3689 bp

**RefSeq ORF:** 8460 bp

**Locus ID:** 25832

**Cytogenetics:** 1q21.2

**Gene Summary:**

This gene is a member of the neuroblastoma breakpoint family (NBPF) which consists of dozens of recently duplicated genes primarily located in segmental duplications on human chromosome 1. This gene family has experienced its greatest expansion within the human lineage and has expanded, to a lesser extent, among primates in general. Members of this gene family are characterized by tandemly repeated copies of DUF1220 protein domains. Gene copy number variations in the human chromosomal region 1q21.1, where most DUF1220 domains are located, have been implicated in a number of developmental and neurogenetic diseases such as microcephaly, macrocephaly, autism, schizophrenia, cognitive disability, congenital heart disease, neuroblastoma, and congenital kidney and urinary tract anomalies. Altered expression of some gene family members is associated with several types of cancer. This gene family contains numerous pseudogenes. [provided by RefSeq, May 2013]