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# Product datasheet for RC212377

## NBPF15 (NM_173638) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | NBPF15 (NM_173638) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | NBPF15 |
| **Synonyms:** | AB14; AG3; NBPF16 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>RC212377 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGGTATCAGCCGGCCCTTTGTCCAGCGAGAAGGCAGAGATGAACATTCTAGAAATCAATGAGAAAT
TGCGCCCCCAGTTGGCAGAGAAGAAACAGCAGTTCAGAAACCTCAAAGAGAAATGTTTTCTAACTCAACT
GGCCGGCTTCCTGGCCAACCGACAGAAGAAATACAAATATGAAGAGTGCAAAGATCTCATAAAATTTATG
CTGAGGAATGAGCGACAGTTCAAGGAGGAGAAGCTTGCAGAGCAGCTCAAGCAAGCTGAGGAGCTCAGGC
AATATAAAGTCCTGGTTCACGCTCAGGAACGAGAGCTGACCCAGTTAAGGGAGAAGTTACGGGAAGGGAG
AGATGCCTCCCGCTCATTGAATGAGCATCTCCAGGCCCTCCTCACTCCGGATGAGCCGGACAAGTCCCAG
GGGCAGGACCTCCAAGAACAGCTGGCTGAGGGGTGTAGACTGACACAGCACCTTGTCCAAAAGCTCAGCC
CAGAAAATGACAACGATGACGATGAAGATGTTCAAGTTGAGGTGGCTGAGAAAGTGCAGAAATCGTCTGC
CCCCAGGGAGATGCAGAAGGCTGAAGAAAAGGAAGTCCCTGAGGACTCACTGGAGGAATGTGCCATCACT
TGTTCAAATAGCCATGGCCCTTATGACTCCAACCAGCCACATAAGAAAACCAAAATCACATTTGAGGAAG
ACAAAGTCGACTCAACTCTCATTGGCTCATCCTCTCATGTTGAATGGGAGGATGCTGTACACATTATTCC
AGAAAATGAAAGTGATGATGAGGAAGAGGAAGAAAAAGGGCCAGTGTCTCCCAGGAATCTGCAGGAGTCT
GAAGAGGAGGAAGTCCCCCAGGAGTCCTGGGATGAAGGTTATTCGACTCTCTCAATTCCTCCTGAAATGT
TGGCCTCGTACCAGTCTTACAGCAGCACATTTCACTCATTAGAGGAACAGCAAGTCTGCATGGCTGTTGA
CATAGGCAGACATCGGTGGGATCAAGTGAAAAAGGAGGACCAAGAGGCAACAGGTCCCAGGCTCAGCAGG
GAGCTGCTGGATGAGAAAGAGCCTGAAGTCTTGCAGGACTCACTGGATAGATGTTATTCAACTCCTTCAG
GTTGTCTTGAACTGACTGACTCATGCCAGCCCTACAGAAGTGCCTTTTACGTATTGGAGCAACAGCGTGT
TGGCTTGGCTATTGACATGGATGAAATTGAAAAGTACCAAGAAGTGGAAGAAGACCAAGACCCATCATGC
CCCAGGCTCAGCAGGGAGCTGCTGGATGAGAAAGAGCCTGAAGTCTTGCAGGACTCACTGGATAGATGTT
ATTCAACTCCTTCAGATTATCTTGAACTGCCTGACTTAGGCCAGCCCTACAGCAGTGCTGTTTACTCATT
GGAGGAACAGTACCTTGGCTTGGCTCTTGCCGTGGACAGAATTAAAAAGGACCAAGAAGAGGAAGAAGAC
CAAGGCCCACCATGCCCCAGGCTCAGCAGGGAGCTGCTGGAGGTAGTAGAGCCTGAAGTCTTGCAGGACT
CACTGGATAGATGTTATTCAACTCCTTCCAGTTGTCTTGAACAGCCTGACTCCTGCCAGCCCTATGGAAG
TTCCTTTTATGCATTGGAGGAAAAACATGTTGGCTTTTCTCTTGACGTGGGAGAAATTGAAAAGAAGGGG
AAGGGGAAGAAAAGAAGGGGAAGAAGATCAAAGAAGAAAAGAAGAAGGGGAAGAAAAGAAGGGGAAGATG
ACAACCCACCATGCCCCAGGCTCTACGGCGTGCTGATGGAAGTGGAAGAGCCTGAAGTCTTACAGGACTC
ACTGGATAGATGTTATTCGACTCCGTCAATGTACTTTGAACAACCTGACTCATTCCAGCACTACAGAAGT
GTGTTTTACTCATTTGAGGAAGAGCATATCAGCTTCGCCCTTTACGTGGACAATAGGTTTTTTACTTTGA
CGGTGACAAGTCTCCACCTGGTGTTCCAGATGGGAGTCATATTCCCACAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC212377 protein sequence
Red=Cloning site Green=Tags(s)

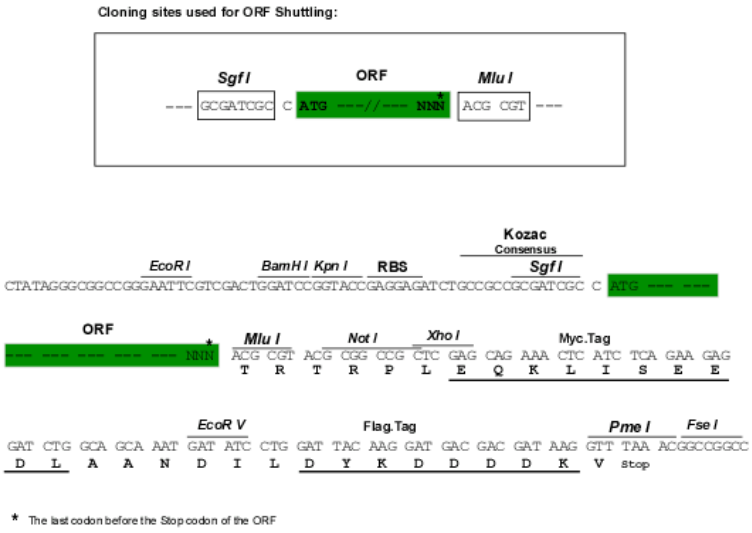
MVVSAGPLSSEKAEMNILEINEKLRPQLAEKKQQFRNLKEKCFLTQLAGFLANRQKKYKYEECKDLIKFM
LRNERQFKEEKLAEQLKQAEELRQYKVLVHAQERELTQLREKLREGRDASRSLNEHLQALLTPDEPDKSQ
GQDLQEQLAEGCRLTQHLVQKLSPENDNDDDEDVQVEVAEKVQKSSAPREMQKAEEKEVPEDSLEECAIT
CSNSHGPYDSNQPHKKTKITFEEDKVDSTLIGSSSHVEWEDAVHIIPENESDDEEEEEKGPVSPRNLQES
EEEEVPQESWDEGYSTLSIPPEMLASYQSYSSTFHSLEEQQVCMAVDIGRHRWDQVKKEDQEATGPRLSR
ELLDEKEPEVLQDSLDRCYSTPSGCLELTDSCQPYRSAFYVLEQQRVGLAIDMDEIEKYQEVEEDQDPSC
PRLSRELLDEKEPEVLQDSLDRCYSTPSDYLELPDLGQPYSSAVYSLEEQYLGLALAVDRIKKDQEEEED
QGPPCPRLSRELLEVVEPEVLQDSLDRCYSTPSSCLEQPDSCQPYGSSFYALEEKHVGFSLDVGEIEKKG
KGKKRRGRRSKKKRRRGRKEGEDDNPPCPRLYGVLMEVEEPEVLQDSLDRCYSTPSMYFEQPDSFQHYRS
VFYSFEEEHISFALYVDNRFFTLTVTSLHLVFQMGVIFPQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** https://cdn.origene.com/chromatograms/mk6695_g08.zip

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



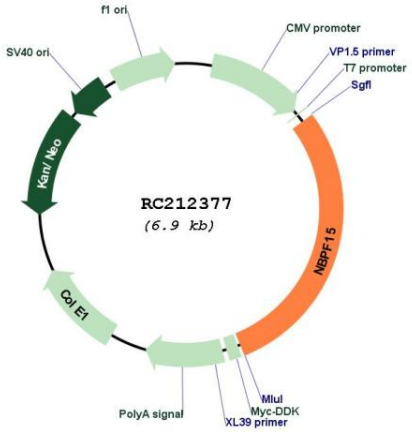

**ACCN:** NM_173638

**ORF Size:** 2010 bp

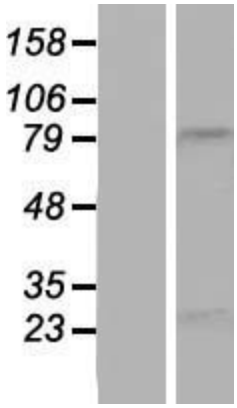
| | |
|---|---|
| **OTI Disclaimer:** | Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.<br><br>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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_173638.2, NP_775909.1 |
| **RefSeq Size:** | 4272 bp |
| **RefSeq ORF:** | 2013 bp |
| **Locus ID:** | 284565 |
| **UniProt ID:** | Q8N660 |
| **Cytogenetics:** | 1q21.1 |
| **MW:** | 77.5 kDa |

**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]

## Product images:




Circular map for RC212377




Western blot validation of overexpression lysate (Cat# [LY406526]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212377 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).