

Product datasheet for **MG204061**

Nhej1 (NM_029342) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Nhej1 (NM_029342) Mouse Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | Nhej1 |
| Synonyms: | 1700029B21Rik; cernunnos; XLF |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| ORF Nucleotide Sequence: | >MG204061 representing NM_029342 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGAGCTAGAGCAAGACCTGTTGCTGCAGCCATGGGCATGGTTACAACCTTGCGGAGAACTCACTCT
TAGCCAAGGTGTCTATCACCAAGCACGGTTATGCCTTGCTGATTTTCGGATCTTCAACAGGTGTGGCATGA
ACAGGTGGACACTTCGGTGGTCAGCCAGCGAGCCAAGGAGCTGAACAAGCGCCTCACTGCGCCTCCTGCA
GCTTTGCTCTGTCACCTGGATGAAGCACTTCGCCCACTGTTAAAGATTCTGCTCACCTAGCAAAGCTA
CTTTCTCCTGTGACCGAGGAGAGGGACTGATCCTGCGGGTGCAGAGTGAGCTCTCGGGTCTTCCCTT
CAGTTGGCATTTCCTACTGTATTCCAGCTAGTTCTTCACTGGTCTCTCAGCATTGATTATCCTCTGATG
GGTGTGAGCCTGGCACTGCAGAGTCATGTGAGGGAGCTAGCAGCATTGCTTCGGATGAAGGACCTTGAGA
TCCAGGCCTACCAGGAGAGTGGGGCTGTGCTGAGCCGAAGTCGATTGAAGACAGAGCCATTTGAAGAAAA
TTCTTTCTTGGAAACAGTTTATGGCAGAGAAATTGCCAGAGGCGTGTGCTGTTGGTGTGAAAGCCATTT
GCCATGAGTCTGCAGAGTCTGTATGTGGCAGTTACAAAACAGCAGATCCAAGCAAGGCAGGCACATAAAG
ACTCTGGAGAGACTCAGGCATCAAGCAGCACCTCCCTCGAGGAAGTATAACCAGCCAGAAGAGCCGGT
CTCCCTCCCTCCACCCTCTCAGAACCTGAATATGAGCCTGTGGCTGCTTCAGGCCCTATGCATAGAGCT
CAGCTGGTGAAGTCCAAGAGGAAGAAGCCAGGGGACTTTCAGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >MG204061 representing NM_029342
 Red=Cloning site Green=Tags(s)

MEELEQDLLLQPWAWLQLAENSLAKVSITKHGYALLISDLQQVWHEQVDTSVVSQRAKELNKRLTAPPA
 ALLCHLDEALRPLFKDSAHPKATFSCDRGEEGLILRVQSEL SGLPFSWHFHCIPASSSLVSQHLIHP
 LM GVSLALQSHVRELAALLRMKDLEIQAYQESGAVLSRSRLKTEPFEENSFLEQFMAEKLPEACAVGDGKPF
 AMSLQSLYVAVTKQQIQARQAHKDSGETQASSSTSPRGTDNQPEEPVSLPSTLSEPEYEPVAASGPMHRA
 QLVKSKRKKPRGLFS

TRTRPLE - GFP Tag - V

Restriction Sites:

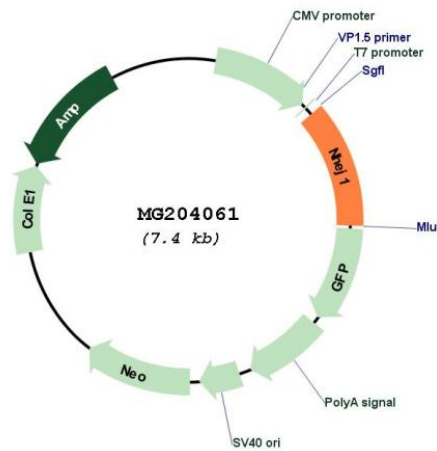
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_029342

ORF Size: 885 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: | <ol style="list-style-type: none">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_029342.2 |
| RefSeq Size: | 1401 bp |
| RefSeq ORF: | 888 bp |
| Locus ID: | 75570 |
| UniProt ID: | Q3KNJ2 |
| Cytogenetics: | 1 C4 |
| Gene Summary: | DNA repair protein involved in DNA nonhomologous end joining (NHEJ) required for double-strand break (DSB) repair and V(D)J recombination. May serve as a bridge between XRCC4 and the other NHEJ factors located at DNA ends, or may participate in reconfiguration of the end bound NHEJ factors to allow XRCC4 access to the DNA termini. It may act in concert with XRCC6/XRCC5 (Ku) to stimulate XRCC4-mediated joining of blunt ends and several types of mismatched ends that are noncomplementary or partially complementary (PubMed:17360556). Binds DNA in a length-dependent manner (By similarity). [UniProtKB/Swiss-Prot Function] |