

Product datasheet for **MC217894**

Neil1 (BC043297) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Neil1 (BC043297) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Neil1
Synonyms:	2810450N13Rik; Nei1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>BC043297 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCCAGAGGGCCAGAGCTGCACCTGGCCAGCCACTTTGTGAATGAGACATGTAAGGGGCTGGTATTTG
GTGGGTGTGTGGAGAAGTCTCTGTCCAGCCGGAACCCGGAGGTGCCCTTTGAGAGCAGTGCCACACAT
CTCAGCTTTAGCCCGAGGCAAGGAGCTGCGCTTGACATTGAGCCCTGCCTGGTCCCAGCCCCCTCAG
AAGCCACTGTCCCTTGTCTTCCGCTTTGGGATGTCAGGATCCTTCCAGCTGGTACCCGCAGAGGCACTGC
CCCGCCACGCCATCTACGTTTTTACACAGCCCCACCTGCTCCCGGCTTGCCCTTGTTCGTAGACAT
CCGTGCTTTGGCCACTGGGATCCTGGGGTGAATGGCAACCAGGCCGTGGACCTGTGTCTTGGTGGAG
TATGAACGGTTCAGAGAGAACGTACTTCGGAACCTATCAGACAAAGCCTTTGACCGGCCATCTGCGAGG
CCTTGTGGACCAGAGGTTCTTCAATGGCATTGGCAACTATCTGCGGGCAGAGATCCTGTACCGGCTGAA
GATCCCTCCTTTGAGAAGGCTCGTACAGTTCTAGAGGCCCTGCAACAGTGCCGGCCGAGCCAGAGCTG
ACCCTGAGCCAGAAGATCAAGGCCAACTACAGAACCCAGACCTGCTGGAAGTGTGCTCACTTGGTCCCA
AGGAAGTGGTTCAGCTGGGTGAGGCTGGGGAGGTCAAGATGGCCGGCGGCTCTACCTTAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-MluI
ACCN:	BC043297
Insert Size:	762 bp



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OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	BC043297 , AAH43297
RefSeq Size:	1857 bp
RefSeq ORF:	761 bp
Locus ID:	72774
Cytogenetics:	9 B
Gene Summary:	Involved in base excision repair of DNA damaged by oxidation or by mutagenic agents. Acts as DNA glycosylase that recognizes and removes damaged bases. Has a preference for oxidized pyrimidines, such as thymine glycol, formamidopyrimidine (Fapy) and 5-hydroxyuracil. Has marginal activity towards 8-oxoguanine. Has AP (apurinic/aprimidinic) lyase activity and introduces nicks in the DNA strand. Cleaves the DNA backbone by beta-delta elimination to generate a single-strand break at the site of the removed base with both 3'- and 5'-phosphates. Has DNA glycosylase/lyase activity towards mismatched uracil and thymine, in particular in U:C and T:C mismatches. Specifically binds 5-hydroxymethylcytosine (5hmC), suggesting that it acts as a specific reader of 5hmC.[UniProtKB/Swiss-Prot Function]