

Product datasheet for **SC324496**

NEIL2 (NM_145043) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NEIL2 (NM_145043) Human Untagged Clone
Tag:	Tag Free
Symbol:	NEIL2
Synonyms:	NEH2; NEI2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_145043.1
 TAGCGGTGCTGGGTGGGCGGACGTGCCACCCACCCGGAGCCGGGATGCCAGAAGGGCCG
 TTGGTGAGGAAATTTACCATTGGTCTCCCCCTTTGTGGGTGAGCAGGTGGTCAAGACA
 GGGGCGAGCAGTAAGAAGCTACAGCCCGCCAGCCTGCAGTCTCTGTGGTCCAGGACACC
 CAGGTCCATGGAAAGAAATTTCTTATGATTTGATCTAGATGAAGAAATGGGCCCCCT
 GGCAGCAGCCCAACACCAGAGCCTCCACAAAAAGAAGTGCAGAAGGAAGGGGCTGCGGAC
 CCAAAGCAGGTGGGGAGCCAGCGGGCAGAAGACCCTTGATGGATCCTCACGGTCTGCA
 GAGCTCGTCCCCAGGGCGAGGATGATTCTGAGTATTTGGAGAGAGACGCCCTGCAGGA
 GATGCTGGGAGGTGGCTGCGTGTGAGCTTTGGTTGTTTGGCAGCGTTTGGGTGAACGAT
 TTCTCCAGAGCCAAGAAAGCCAACAAGAGGGGGGACTGGAGGGACCCTTCCCCGAGGTTG
 GTCCTGCACTTTGGTGGTGGTGGCTTCTGGCATTATAAATTGCAGTTGTCTGGAGC
 TCTTCCCCGGTGGTACACCCACCTGTGACATCCTGTCTGAGAAGTTCATCGAGGACAA
 GCCTTAGAAGCTTAGGCCAGGCTCAGCCTGTCTGCTATACACTGCTGGACCAGAGATAC
 TTCTCAGGGCTAGGGAACATCATTAGAATGAAGCCTTGTACAGAGCTGGGATCCATCCC
 CTTTCTCTCGGTTGAGTCTGAGTGCCTCGCGTGGGAGGTCCTGGTGGATCACGTGGTG
 GAGTTCAGTACAGCCTGGCTGCAGGGCAAGTCCAAGGCAGACCCAGCACACAGGTC
 TACCAGAAAGAACAGTGCCTGCTGGCCACCAGGTCATGAAGGAGGCGTTTGGGCCCGAA
 GATGGGTACAGAGGCTCACCTGGTGGTGGCCGAGTGCAGCCCGAGTTGTGAGAGGAG
 CCAGAGCAGTGCAGTTCCTAAGGAGCTGGTGGTGGTCTCCTCATGGAACCTTGGCGTTG
 GGGAACTGACGTCTAAGTGTCCAGAAAGGAGGATGTGGGCGAGGACGGGGTACAGAGGA
 TAGTGTGGGTGAGAGTGCAGTAGTATAATATTCATCTCCCTGGAGTTATGTTGAAGGC
 AGAGTTTTCATAGGTTAGATTTTTTTTTATCCTTTTCTAGTTCAGTTAATTCATCCTGTT
 GAATTGCACCATCGTGAAGATGGGAAAAATCGTGATGATGGGTAAAGGGAAAACTCCC
 GGAAGGCAATGGGGCAAGGAAAAAGAAAGCCTATGGGAAATGGCTGTGCTCCCAACATAG
 CTTTGCAGATGATGTGGTTTTTTTTTTTTTTTTTTTTGGTTGTTTGTGAGAGAGATC
 TTGCTCTGCTCCCTGGCTAGGGTGTGGTGGTGTGATCTTGGCTCACGGCAGCCTTGCCC
 TCCCTGGCTCAAGCAGTCTTCTCAGCCTCCAGAGTAGCTGGGACTACAGGCATGTGA
 TATGATGCTCGGCTGATTTTTGTTACTTTTTAGAGAGATGGGGTCTGCCATATTTGCC
 AGGCTGGTTTGAACCTCAACTCAAGCATTCTCCACCTTGGTCTCCCAAAATGTTG
 GGACCACGGGTGTGAGCCACCGCCAGCTAGCTCCTGTGTTTTGTTTTGTTTTGTAA
 CTTTGGTTGATGTTAAGGCCCTCATTGTTGAAAGCAGGAAAACAGGATTTTTTTTTTTT
 ATCTTGTCCCTGGAGGATCCAGGGATGAGGATAGAGTGGCTGAGAGCAGTGTCTGGAT
 TCAGCCTCCTGCTGGGTCTTCTGCTGGATACAGGCACCAAGAGGCGGGGTGGAGCAGG
 GAGCTGCGCCTTCTGGGGTGGCCGGTGGTGTGTAGAGAAAAGCTGCTTGTTTACTCCTT
 AAGTCAATGTATTGGTACTGTTGATTTGTTGAACAATTCAGGAATCAAGGGCTGTGGAG
 AAACCTCCCTCATGTTGTTGGCAACAGGTGAATGAACCTAGAGCGGTGACATGAAAATAAA
 GCTCACTGTTACTCGCAA
 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_145043

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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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:	<u>NM_145043.1</u> , <u>NP_659480.1</u>
RefSeq Size:	2661 bp
RefSeq ORF:	999 bp
Locus ID:	252969
UniProt ID:	<u>Q969S2</u>
Cytogenetics:	8p23.1
Domains:	Fapy_DNA_glyco
Protein Families:	Druggable Genome
Protein Pathways:	Base excision repair
Gene Summary:	<p>This gene encodes a member of the Fpg/Nei family of DNA glycosylases. These glycosylases initiate the first step in base excision repair by cleaving oxidatively damaged bases and introducing a DNA strand break via their abasic site lyase activity. This enzyme is primarily associated with DNA repair during transcription and acts preferentially on cytosine-derived lesions, particularly 5-hydroxyuracil and 5-hydroxycytosine. It contains an N-terminal catalytic domain, a hinge region, and a C-terminal DNA-binding domain with helix-two-turn-helix and zinc finger motifs. This enzyme interacts with the X-ray cross complementing factor 1 scaffold protein as part of a multi-protein DNA repair complex. A pseudogene of this gene has been identified. [provided by RefSeq, Mar 2017]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (a). Variants 1, 2, and 8 encode the same isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>