

## Product datasheet for **TP503232**

### Neil1 (BC043297) Mouse Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Purified recombinant protein of Mouse nei endonuclease VIII-like 1 (E. coli) (cDNA clone MGC:49102 IMAGE:5320651), complete cds, with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

**Species:** Mouse

**Expression Host:** HEK293T

**Expression cDNA Clone or AA Sequence:** >MR203232 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MPEGPELHLASHFVNETCKGLVFGGCVEKSSVSRNPEVPPFESSAYHISALARGKELRLTSLPLGSGPPQ  
KPLSLVFRFGMSGFQLVPAEALPRHAHLRFYTAPPAPRLALCFVDIRRFHWDPPGGEWQPGRGPCVLLLE  
YERFRENVLRLNSDKAFDRPICEALLDQRFFNGIGNYLRAEILYRLKIPPFKARTVLEALQPCRPSPEL  
TLSQKIKAKLQNPDLLELCHLVPKEVQLGEAWGGQDGRRLPL

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-MYC/DDK

**Predicted MW:** 28.5 kDa

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

**Storage:** Store at -80°C after receiving vials.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**Locus ID:** 72774

**UniProt ID:** [Q8K4Q6](#)

**RefSeq Size:** 1857



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Cytogenetics: 9 B

RefSeq ORF: 759

Synonyms: 2810450N13Rik; Nei1

**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]