

## Active Recombinant E.coli nei

Cat. No. nei-53E    Lot. No. (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | An E. coli strain which carries the cloned Endonuclease VIII gene.                                                                                                                                                                                                                                                                                                                                                                |
| <b>Species</b>          | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Description</b>      | E.coli Endonuclease VIII functions as both an N-glycosylase (by excising oxidative base lesions) and an AP lyase (by subsequently cleaving the phosphodiester backbone), leaving terminal phosphates at the 5' and 3' ends. Damaged bases removed by Endonuclease VIII include: urea, 5, 6- dihydroxythymine, thymine glycol, 5-hydroxy-5- methylhydanton, uracil glycol, 6-hydroxy-5, 6- dihydrothymine and methyltartronylurea. |
| <b>Bio-activity</b>     | 770,000 U/mg                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Molecular Mass</b>   | 29,845 Daltons                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Purity</b>           | >99% by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Unit Definition</b>  | One unit is defined as the amount of enzyme required to cleave 1 pmol of an oligonucleotide duplex containing a single AP site in 1 hour at 37°C.                                                                                                                                                                                                                                                                                 |
| <b>Storage</b>          | -25 to -15°C                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Concentration</b>    | 10,000 U/mL                                                                                                                                                                                                                                                                                                                                                                                                                       |

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**Storage Buffer**

Supplied in: 10mM Tris-HCL, 250 mM NaCl, 0.1mM EDTA, 50% glycerol pH 8.0 @ 25°C. Supplied with: 10X Endonuclease VIII Buffer: 100mM Tris-HCl, 750mM NaCl, 10mM EDTA pH 8.0 @ 25°C.

**GENE INFORMATION**

**Gene Name** [nei endonuclease VIII \[ Escherichia coli str. K-12 substr. W3110 \]](#)

**Official Symbol** [nei](#)

**Synonyms** [nei](#); endonuclease VIII; YP\_488994.1; 5-formyluracil/5-hydroxymethyluracil DNA glycosylase~ECK0703:JW0704:b0714

**Gene ID** [12930934](#)

**Protein Refseq** [YP\\_488994](#)

**UniProt ID** [AP\\_001352](#)

**Pathway** [Base excision repair](#)

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