



Recombinant Human Endonuclease 8-like 1 (NEIL1)

Product Code	CSB-EP846619HU
Relevance	Involved in base excision repair of DNA damaged by oxidation or by mutagenic agents. Acts as DNA glycosylase that recognizes and roves 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 roved 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.
Abbreviation	Recombinant Human NEIL1 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q96FI4
Alias	DNA glycosylase/AP lyase Neil1DNA-(apurinic or apyrimidinic site) lyase Neil1Endonuclease VIII-like 1FPG1Nei homolog 1 ;NEH1Nei-like protein 1
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	PEGPELHLASQFVNEACRALVFGGCVEKSSVSRNPEVPFESSAYRISASARGK ELRLILSPLPGAQPQQEPLALVFRFGMSGFSFQLVPREELPRHAHLRFYTAPPG PRLALCFVDIRRFGRWDLGGKWQPGRGPCVLQEYQQFRENVLRLNLADKA FDRPICEALLDQRRFFNGIGNYLRAEILYRLKIPPFKARSVLEALQQHRPSPEL TLSQKIRTKLQNPDLLELCHSVPKEVVQLGGKGYGSESGEEDFAAFRAWLRCYGM PGMSSLQDRHGRITWIFQGDGPGLAPKGRKSRKKKSKATQLSPEDRVEDALPP SKAPSRTRRAKRDLPKRTATQRPEGTSLQQDPEAPTVPKKGRRKGRQAASG HCRPRKVKADIPSLEPEGTSAS
Research Area	Epigenetics and Nuclear Signaling
Source	E.coli
Target Names	NEIL1
Expression Region	2-390aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

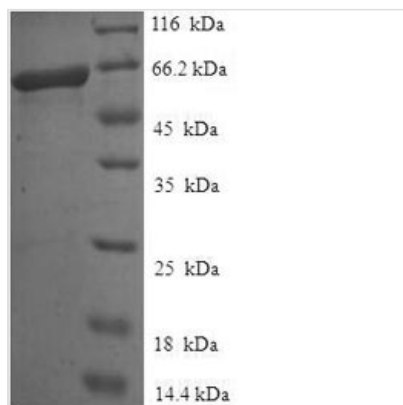


Tag Info N-terminal 6xHis-SUMO-tagged

Mol. Weight 59.6kDa

Protein Length Full Length of Mature Protein

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.