Datasheet for ABIN7317344

NEIL1 Protein (His tag)

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Overview

Quantity:	50 µg
Target:	NEIL1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NEIL1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human NEIL1 Protein (His Tag)
Sequence:	Met 1-Ser 390
Characteristics:	A DNA sequence encoding the human NEIL1 (AAH10876.1) (Met 1-Ser 390) was fused with a polyhistidine tag at the C-terminus and an initial Met at the N-terminus.
Purity:	> 84 % as determined by reducing SDS-PAGE.

Target Details

Target:	NEIL1
Alternative Name:	NEIL1 (NEIL1 Products)
Background:	Background: NEIL1 is a member of DNA glycosylases. DNA glycosylases are a family homologous to the bacterial Fpg/Nei family. They play a role in base excision repair which is the mechanism by which damaged bases in DNA are removed and replaced. The first step of this process is catalyzed by DNA glycosylases. They remove the damaged nitrogenous base

Target Details

	while leaving the sugar-phosphate backbone intact, creating an apurinic/apyrimidinic site, commonly referred to as an AP site. NEIL1 functions in base excision repair of DNA damaged by oxidation or by mutagenic agents. It acts as DNA glycosylase that recognizes and removes damaged bases. NEIL1 prefers to oxidized pyrimidines, such as thymine glycol, formamidopyrimidine (Fapy) and 5-hydroxyuracil. Has marginal activity towards 8-oxoguanine. It has AP (apurinic/apyrimidinic) lyase activity and introduces nicks in the DNA strand and 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. Synonym: FPG1,hFPG1,NEI1
Molecular Weight:	45 kDa
Pathways:	DNA Damage Repair

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 50 mM Tris, 150 mM NaCl, pH 8.0
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.