10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NEIL2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16044a

Product Information

Application	WB, E
Primary Accession	Q969S2
Other Accession	NP_001129220.1, NP_001129218.1, NP_659480.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35271
Calculated MW	36826
Antigen Region	67-96

Additional Information

Gene ID	252969
Other Names	Endonuclease 8-like 2, 322-, DNA glycosylase/AP lyase Neil2, DNA-(apurinic or apyrimidinic site) lyase Neil2, Endonuclease VIII-like 2, Nei homolog 2, NEH2, Nei-like protein 2, NEIL2
Target/Specificity	This NEIL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 67-96 amino acids from the N-terminal region of human NEIL2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NEIL2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NEIL2
Function	Involved in base excision repair of DNA damaged by oxidation or by mutagenic agents. Has DNA glycosylase activity towards 5- hydroxyuracil and

	other oxidized derivatives of cytosine with a preference for mismatched double-stranded DNA (DNA bubbles). Has low or no DNA glycosylase activity towards thymine glycol, 2-hydroxyadenine, hypoxanthine and 8-oxoguanine. Has AP (apurinic/apyrimidinic) 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.
Cellular Location	Nucleus.
Tissue Location	Detected in testis, skeletal muscle, heart, brain, placenta, lung, pancreas, kidney and liver

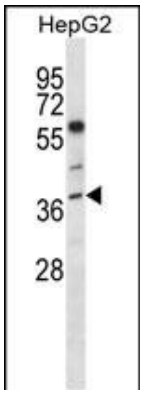
Background

NEIL2 belongs to a class of DNA glycosylases homologous to the bacterial Fpg/Nei family. These glycosylases initiate the first step in base excision repair by cleaving bases damaged by reactive oxygen species and introducing a DNA strand break via the associated lyase reaction (Bandaru et al., 2002 [PubMed 12509226])

References

Briggs, F.B., et al. Am. J. Epidemiol. 172(2):217-224(2010)
Monsees, G.M., et al. Breast Cancer Res. Treat. (2010) In press :
Grin, I.R., et al. Biochem. Biophys. Res. Commun. 394(1):100-105(2010)
Kinslow, C.J., et al. Genes Chromosomes Cancer 47(11):923-932(2008)
Zhai, X., et al. Clin. Cancer Res. 14(13):4345-4352(2008)

Images



NEIL2 Antibody (N-term) (Cat. #AP16044a) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the NEIL2 antibody detected the NEIL2 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.