

NEIL1 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9696c**Specification**

NEIL1 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	Q96FI4
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	43684
Antigen Region	130-159

NEIL1 Antibody (Center) - Additional Information**Gene ID** 79661**Other Names**

Endonuclease 8-like 1, 322-, DNA glycosylase/AP lyase Neil1, DNA-(apurinic or apyrimidinic site) lyase Neil1, Endonuclease VIII-like 1, FPG1, Nei homolog 1, NEH1, Nei-like protein 1, NEIL1

Target/Specificity

This NEIL1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 130-159 amino acids from the Central region of human NEIL1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

NEIL1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

NEIL1 Antibody (Center) - Protein Information**Name** NEIL1

Function Involved in base excision repair of DNA damaged by oxidation or by mutagenic agents. Acts as a 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.

Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus. Chromosome.
Note=During mitosis, associates with centrosomes and condensed chromatin

Tissue Location

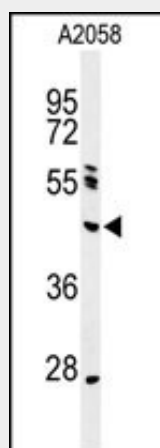
Ubiquitous..

NEIL1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

NEIL1 Antibody (Center) - Images



Western blot analysis of NEIL1 Antibody (Center) (Cat. #AP9696c) in A2058 cell line lysates (35ug/lane). NEIL1 (arrow) was detected using the purified Pab.

NEIL1 Antibody (Center) - Background

NEIL1 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]).

NEIL1 Antibody (Center) - References

Zhao, X., et al. Biochemistry 49(8):1658-1666(2010)
Forsbring, M., et al. Carcinogenesis 30(7):1147-1154(2009)
Couve, S., et al. J. Biol. Chem. 284(18):11963-11970(2009)
Muftuoglu, M., et al. J. Biol. Chem. 284(14):9270-9279(2009)
Horikawa, Y., et al. Clin. Cancer Res. 14(23):7956-7962(2008)