For Research Use Only

CoraLite® Plus 488-conjugated NEIL1 Monoclonal antibody



Catalog Number: CL488-67012

Catalog Number: **Basic Information**

GenBank Accession Number:

Purification Method:

CL488-67012

BC010876

Protein A purification

GeneID (NCBI):

CloneNo.:

493 nm / 522 nm

100ul, Concentration: 1000 ug/ml by 79661

1C6D6

Nanodrop:

UNIPROT ID: Q96FI4

Recommended Dilutions: IF/ICC 1:50-1:500

Mouse

Full Name:

Excitation/Emission maxima

Isotype: IgG2a

nei endonuclease VIII-like 1 (E. coli) wavelengths: Calculated MW:

390 aa, 44 kDa

Immunogen Catalog Number: AG8307

Observed MW:

44 kDa

Applications

Tested Applications:

IF/ICC

Positive Controls:

Species Specificity:

Human

IF/ICC: HepG2 cells,

Background Information

NEIL1, also named as NEH1 and FPG1, belongs to the FPG family. It is involved in base excision repair of DNA damaged by oxidation or by mutagenic agents. NEIL1 acts as DNA glycosylase that recognizes and removes damaged bases. It has a preference for oxidized pyrimidines, such as thymine glycol, formamidopyrimidine (Fapy) and 5-hydroxyuracil. NEIL1 has marginal activity towards 8-oxoguanine. It has AP (apurinic/apyrimidinic) lyase activity and introduces nicks in the DNA strand. It 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. NEIL1 has DNA glycosylase/lyase activity towards mismatched uracil and thymine, in particular in U:C and T:C mismatches. The increased BER activity of NEILs may represent an adaptive response against ROS-induced DNA damage resulting from aniline exposure, and could be an important mechanism for the removal of oxidative DNA lesions. (PMID:21145906)

Storage

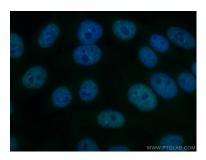
Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Coralite® Plus 488-conjugated NEIL1 antibody (CL488-67012, Clone: 1C6D6) at dilution of 1:100.