

CoraLite® Plus 488-conjugated NEIL1 Monoclonal antibody

Catalog Number: **CL488-67012**

Basic Information

Catalog Number: CL488-67012	GenBank Accession Number: BC010876	Purification Method: Protein A purification
Size: 1000 µg/ml	GeneID (NCBI): 79661	CloneNo.: 1C6D6
Source: Mouse	UNIPROT ID: Q96FI4	Recommended Dilutions: IF/ICC 1:50-1:500
Isotype: IgG2a	Full Name: nei endonuclease VIII-like 1 (E. coli)	Excitation/Emission maxima wavelengths: 493 nm / 522 nm
Immunogen Catalog Number: AG8307	Calculated MW: 390 aa, 44 kDa	
	Observed MW: 44 kDa	

Applications

Tested Applications: IF/ICC	Positive Controls: IF/ICC : HepG2 cells,
Species Specificity: Human	

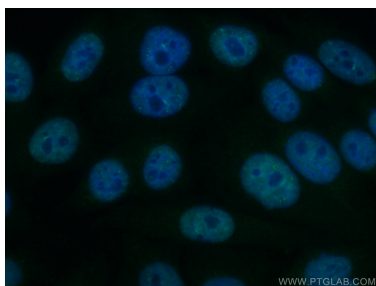
Background Information

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.
Storage Buffer:
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.