

For Research Use Only

# CoraLite® Plus 488-conjugated NEIL1 Monoclonal antibody



Catalog Number:CL488-67012

## Basic Information

<b>Catalog Number:</b> CL488-67012	<b>GenBank Accession Number:</b> BC010876	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 79661	<b>CloneNo.:</b> 1C6D6
<b>Source:</b> Mouse	<b>Full Name:</b> nei endonuclease VIII-like 1 (E. coli)	<b>Recommended Dilutions:</b> IF 1:50-1:500
<b>Isotype:</b> IgG2a	<b>Calculated MW:</b> 390 aa, 44 kDa	<b>Excitation/Emission maxima wavelengths:</b> 488 nm / 515 nm
<b>Immunogen Catalog Number:</b> AG8307	<b>Observed MW:</b> 44 kDa	

## Applications

<b>Tested Applications:</b> IF	<b>Positive Controls:</b> IF : HepG2 cells,
<b>Species Specificity:</b> 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/aprimidinic) 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

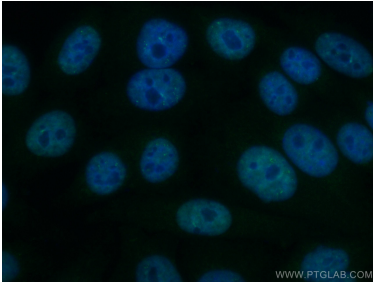
**Storage:**  
Store at -20°C. Avoid exposure to light.  
**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com W: ptglab.com

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## 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.