

NTH1 Antibody

Rabbit mAb Catalog # AP93021

Specification

NTH1 Antibody - Product Information

Application WB, IHC, ICC Primary Accession P78549

Clonality
Other Names

hNTH1; NTH1; Nthl1; OCTS3;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 34390 Da

NTH1 Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500

ICC~~N/A

Monoclonal

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

NTH1

Description Has both an apurinic and/or apyrimidinic

endonuclease activity and a DNA

N-glycosylase activity. Incises damaged DNA at cytosines, thymines and guanines. Acts on a damaged strand, 5' from the damaged site. Required for the repair of

both oxidative DNA damage and spontaneous mutagenic lesions.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

NTH1 Antibody - Protein Information

Name NTHL1 {ECO:0000255|HAMAP-Rule:MF_03183}

Synonyms NTH1, OCTS3

Function

Bifunctional DNA N-glycosylase with associated apurinic/apyrimidinic (AP) lyase function that catalyzes the first step in base excision repair (BER), the primary repair pathway for the repair of oxidative DNA damage (PubMed:29610152, PubMed:<a href="http://www.uniprot.org/citations/9927729"



target="_blank">9927729). The DNA N-glycosylase activity releases the damaged DNA base from DNA by cleaving the N-glycosidic bond, leaving an AP site. The AP-lyase activity cleaves the phosphodiester bond 3' to the AP site by a beta- elimination. Primarily recognizes and repairs oxidative base damage of pyrimidines. Also has 8-oxo-7,8-dihydroguanine (8-oxoG) DNA glycosylase activity. Acts preferentially on DNA damage opposite guanine residues in DNA. Is able to process lesions in nucleosomes without requiring or inducing nucleosome disruption.

Cellular Location

Nucleus {ECO:0000255|HAMAP-Rule:MF_03183, ECO:0000269|PubMed:10882850, ECO:0000269|PubMed:12531031, ECO:0000269|PubMed:9611236}. Mitochondrion {ECO:0000255|HAMAP-Rule:MF_03183, ECO:0000269|PubMed:9611236}

Tissue Location

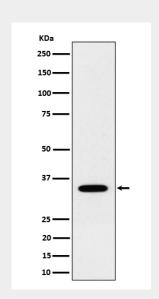
Widely expressed with highest levels in heart and lowest levels in lung and liver.

NTH1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

NTH1 Antibody - Images



Western blot analysis of NTH1 expression in 293 cell lysate.