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NTH1 Antibody
Rabbit mAb
Catalog # AP93021

Specification

NTH1 Antibody - Product Information

Application	**WB, IHC, ICC**
Primary Accession	P78549
Clonality	**Monoclonal**
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**
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}

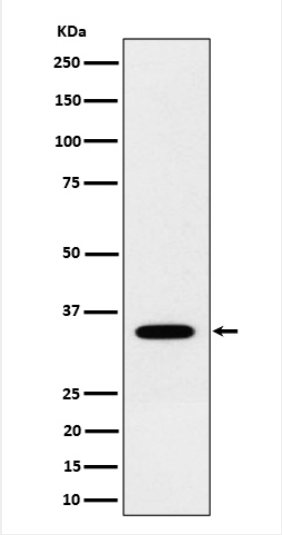
Tissue Location
Widely expressed with highest levels in heart and lowest levels in lung and liver.

NTH1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NTH1 Antibody - Images



Western blot analysis of NTH1 expression in 293 cell lysate.