

NTHL1 Antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI15081

Product Information

Application	WB
Primary Accession	P78549
Other Accession	NM_002528 , NP_002519
Reactivity	Human, Mouse, Rat, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Pig, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33570

Additional Information

Gene ID	4913
Alias Symbol	NTH1, OCTS3
Other Names	Endonuclease III-like protein 1 {ECO:0000255 HAMAP-Rule:MF_03183}, hNTH1, 3.2.2.- {ECO:0000255 HAMAP-Rule:MF_03183}, 4.2.99.18 {ECO:0000255 HAMAP-Rule:MF_03183}, Bifunctional DNA N-glycosylase/DNA-(apurinic or apyrimidinic site) lyase {ECO:0000255 HAMAP-Rule:MF_03183}, DNA glycosylase/AP lyase {ECO:0000255 HAMAP-Rule:MF_03183}, NTHL1 {ECO:0000255 HAMAP-Rule:MF_03183}, NTH1, OCTS3
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-NTHL1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	NTHL1 Antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

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:[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}

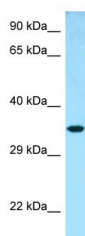
Tissue Location

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

References

Aspinwall R.,et al.Proc. Natl. Acad. Sci. U.S.A. 94:109-114(1997).
Imai K.,et al.Gene 222:287-295(1998).
Martin J.,et al.Nature 432:988-994(2004).
Ikeda S.,et al.J. Biol. Chem. 273:21585-21593(1998).
Hilbert T.P.,et al.J. Biol. Chem. 272:6733-6740(1997).

Images



WB Suggested Anti-NTHL1 Antibody Titration: 1.0 µg/ml
Positive Control: Fetal Lung

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.