

KD-Validated Anti-NTH1 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI2107

Specification

KD-Validated Anti-NTH1 Rabbit Monoclonal Antibody - Product Information

Application	WB, FC
Primary Accession	P78549
Reactivity	Rat, Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 34 kDa, observed, 34 kDa kDa
Gene Name	NTHL1
Aliases	NTHL1; Nth Like DNA Glycosylase 1; OCTS3; NTH1; Bifunctional DNA N-Glycosylase/DNA-(Apyrimidinic Site) Lyase; Endonuclease III-Like Protein 1; DNA Glycosylase/AP Lyase; HNTH1; Bifunctional DNA N-Glycosylase/DNA-(Apyrimidinic Site) Lyase; Nth Endonuclease III-Like 1 (E. Coli); Nth (E.Coli Endonuclease III)-Like 1; Nth Endonuclease III-Like 1; DNA Glycosylase/AP Lyase; EC 4.2.99.18; EC 3.2.2.-;FAP3
Immunogen	Recombinant protein of human NTH1

KD-Validated Anti-NTH1 Rabbit Monoclonal Antibody - Additional Information

Gene ID	4913
Other Names	
Endonuclease III-like protein 1 {ECO:0000255 HAMAP-Rule:MF_03183}, hNTH1, 3.2.2.- {ECO:0000255 HAMAP-Rule:MF_03183, ECO:0000269 PubMed:9927729}, 4.2.99.18 {ECO:0000255 HAMAP-Rule:MF_03183, ECO:0000269 PubMed:9927729}, 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	

KD-Validated Anti-NTH1 Rabbit Monoclonal 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:

target="_blank">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

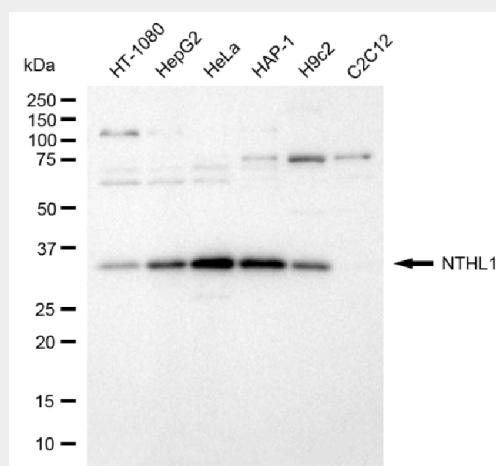
Widely expressed with highest levels in heart and lowest levels in lung and liver.

KD-Validated Anti-NTH1 Rabbit Monoclonal Antibody - Protocols

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

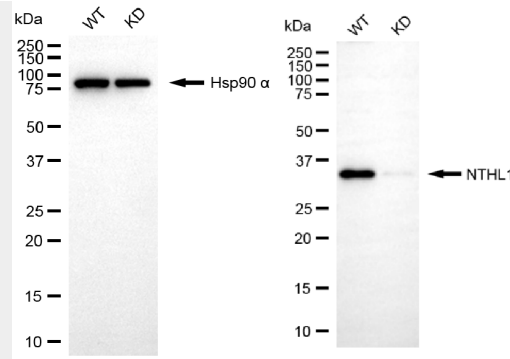
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KD-Validated Anti-NTH1 Rabbit Monoclonal Antibody - Images

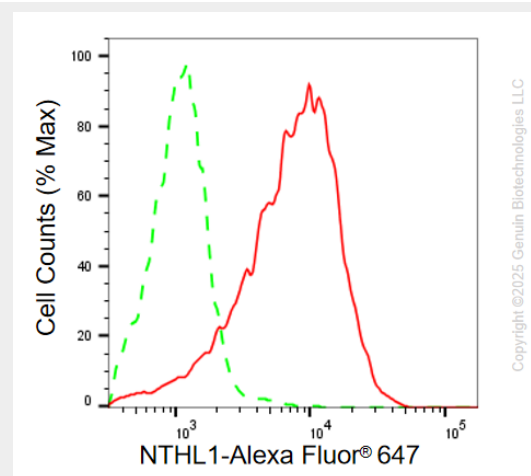


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Western blotting analysis using anti-NTHL1 antibody (Cat#AGI2107). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-NTHL1 antibody (Cat#AGI2107, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-NTHL1 antibody (Cat#AGI2107). NTHL1 expression in wild-type (WT) and NTHL1 knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-NTHL1 antibody (Cat#AGI2107, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of NTHL1 expression in HAP-1 cells using anti-NTHL1 antibody (Cat#AGI2107, 1:2,000). Green, isotype control; red, NTHL1.