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KD-Validated Anti-NTH1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2107

Product Information

Application	WB, FC
Primary Accession	P78549
Reactivity	Rat, Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	24GB13700
Calculated MW	33570
Gene Name	NTHL1
Aliases	NTHL1; Nth Like DNA Glycosylase 1; OCTS3; NTH1; Bifunctional DNA N-Glycosylase/DNA-(Apurinic Or Apyrimidinic Site) Lyase; Endonuclease III-Like Protein 1; DNA Glycosylase/AP Lyase; HNTH1; Bifunctional DNA N-Glycoslyase/DNA-(Apurinic Or Apyrimidinic Site) Lyase; Nth Endonuclease III-Like 1 (E. Coli); Nth (E.Coli Endonuclease III)-Like 1; Nth Endonuclease III-Like 1; DNA Glycoslyase/AP Lyase; EC 4.2.99.18; EC 3.2.2.-;FAP3
Immunogen	Recombinant protein of human NTH1

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

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.