

DNASE1L3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13885a

Specification

DNASE1L3 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB,E <u>Q13609</u> <u>NP_004935.1</u> Rat Rabbit Polyclonal Rabbit IgG 14-43

DNASE1L3 Antibody (N-term) - Additional Information

Gene ID 1776

Other Names Deoxyribonuclease gamma, DNase gamma, 3121-, DNase I homolog protein DHP2, Deoxyribonuclease I-like 3, DNase I-like 3, Liver and spleen DNase, LS-DNase, LSD, DNASE1L3, DHP2, DNAS1L3

Target/Specificity

This DNASE1L3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 14-43 amino acids from the N-terminal region of human DNASE1L3.

Dilution WB~~1:2000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

DNASE1L3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

DNASE1L3 Antibody (N-term) - Protein Information

Name DNASE1L3 (<u>HGNC:2959</u>)

Synonyms DHP2, DNAS1L3



Function Has DNA hydrolytic activity. Is capable of both single- and double-stranded DNA cleavage, producing DNA fragments with 3'-OH ends (By similarity). Can cleave chromatin to nucleosomal units and cleaves nucleosomal and liposome-coated DNA (PubMed:<u>10807908</u>, PubMed:<u>14646506</u>, PubMed:<u>27293190</u>, PubMed:<u>9070308</u>, PubMed:<u>9714828</u>). Acts in internucleosomal DNA fragmentation (INDF) during apoptosis and necrosis (PubMed:<u>23229555</u>, PubMed:<u>24312463</u>). The role in apoptosis includes myogenic and neuronal differentiation, and BCR-mediated clonal deletion of self-reactive B cells (By similarity). Is active on chromatin in apoptotic cell-derived membrane-coated microparticles and thus suppresses anti-DNA autoimmunity (PubMed:<u>27293190</u>). Together with DNASE1, plays a key role in degrading neutrophil extracellular traps (NETs) (By similarity). NETs are mainly composed of DNA fibers and are released by neutrophils to bind pathogens during inflammation (By similarity). Degradation of intravascular NETs by DNASE1 and DNASE1L3 is required to prevent formation of clots that obstruct blood vessels and cause organ damage following inflammation (By similarity).

Cellular Location

Nucleus. Endoplasmic reticulum. Secreted Note=Translocates from the endoplasmic reticulum to the nucleus during apoptosis (PubMed:23229555). Contradictory reports exist about the subcellular localization under normal physiological conditions. Under conditions of cell death, may diffuse and/or be actively transported to the nucleus. {ECO:0000269|PubMed:23229555, ECO:0000305}

Tissue Location Liver and spleen.

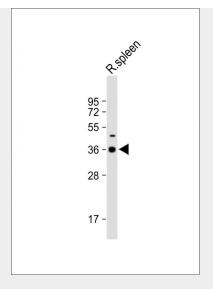
DNASE1L3 Antibody (N-term) - Protocols

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

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

DNASE1L3 Antibody (N-term) - Images





Anti-DNASE1L3 Antibody (N-term) at 1:2000 dilution + Rat spleen lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 36 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

DNASE1L3 Antibody (N-term) - Background

This gene encodes a member of the DNase family. The protein hydrolyzes DNA, is not inhibited by actin, and mediates the breakdown of DNA during apoptosis. Alternate transcriptional splice variants of this gene have been observed but have not been thoroughly characterized.

DNASE1L3 Antibody (N-term) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : Ueki, M., et al. Clin. Chim. Acta 407 (1-2), 20-24 (2009) : Mizuta, R., et al. Biomed. Res. 30(3):165-170(2009) Boulares, H., et al. Biochem. Biophys. Res. Commun. 341(2):653-662(2006) Okamoto, M., et al. Biochem. Biophys. Res. Commun. 327(1):76-83(2005)