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DNASE1L3 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP13885a

Specification

DNASE1L3 Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q13609

DNASE1L3 Antibody (N-term) Blocking peptide - 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
The synthetic peptide sequence used to generate the antibody AP13885a was selected from the N-term region of DNASE1L3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

DNASE1L3 Antibody (N-term) Blocking peptide - Protein Information

Name DNASE1L3 (HGNC:2959)

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:9070308, PubMed:9714828, PubMed:14646506, PubMed:10807908, PubMed:27293190). Acts in internucleosomal DNA fragmentation (INDF) during apoptosis and necrosis (PubMed:<a

href="http://www.uniprot.org/citations/23229555" target="_blank">23229555, PubMed:24312463). 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:27293190). 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) Blocking peptide - Protocols

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

- Blocking Peptides

DNASE1L3 Antibody (N-term) Blocking peptide - Images

DNASE1L3 Antibody (N-term) Blocking peptide - Background

This gene encodes a member of the DNase family. Theprotein hydrolyzes DNA, is not inhibited by actin, and mediates thebreakdown of DNA during apoptosis. Alternate transcriptional splicevariants of this gene have been observed but have not beenthoroughly characterized.

DNASE1L3 Antibody (N-term) Blocking peptide - 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)