

DNASE1 Blocking Peptide (Center)

Synthetic peptide Catalog # BP21123a

Specification

DNASE1 Blocking Peptide (Center) - Product Information

Primary Accession P24855
Other Accession P00639

DNASE1 Blocking Peptide (Center) - Additional Information

Gene ID 1773

Other Names

Deoxyribonuclease-1, Deoxyribonuclease I, DNase I, Dornase alfa, DNASE1, DNL1, DRNI

Target/Specificity

The synthetic peptide sequence is selected from aa 87-101 of HUMAN DNASE1

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.

DNASE1 Blocking Peptide (Center) - Protein Information

Name DNASE1 (HGNC:2956)

Synonyms DNL1, DRNI

Function

Serum endocuclease secreted into body fluids by a wide variety of exocrine and endocrine organs (PubMed:2251263, PubMed:11241278, PubMed:2277032). Expressed by non-hematopoietic tissues and preferentially cleaves protein-free DNA (By similarity). Among other functions, seems to be involved in cell death by apoptosis (PubMed:11241278). Binds specifically to G-actin and blocks actin polymerization (By similarity). Together with DNASE1L3, 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

Secreted. Zymogen granule. Nucleus envelope. Note=Secretory protein, stored in zymogen granules and found in the nuclear envelope

Tissue Location

Principally in tissues of the digestive system. Highest levels found in urine, but also relatively abundant in semen and saliva

DNASE1 Blocking Peptide (Center) - Protocols

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

• Blocking Peptides

DNASE1 Blocking Peptide (Center) - Images

DNASE1 Blocking Peptide (Center) - Background

Among other functions, seems to be involved in cell death by apoptosis. Binds specifically to G-actin and blocks actin polymerization (By similarity).

DNASE1 Blocking Peptide (Center) - References

Shak S.,et al.Proc. Natl. Acad. Sci. U.S.A. 87:9188-9192(1990). Yasuda T.,et al.Ann. Hum. Genet. 59:1-15(1995). Oliveri M.,et al.Eur. J. Immunol. 31:743-751(2001). Kominato Y.,et al.FEBS J. 273:3094-3105(2006). Martin J.,et al.Nature 432:988-994(2004).