DNASE1L3 Protein, Human (GST)

Cat. No.:	HY-P71543
Synonyms:	Deoxyribonuclease gamma; Deoxyribonuclease I like 3; Deoxyribonuclease I like III; Deoxyribonuclease I-like 3; DHP 2; DHP2; DNAS1L3; DNase gamma; DNase I homolog protein 2; DNase I homolog protein DHP2; DNase I like 3; DNase I-like 3; DNASE1L3; DNSL3_HUMAN; Liver and spleen DNase; LS DNase; LS-DNase; LSD; SLEB 16; SLEB16
Species:	Human
Source:	E. coli
Accession:	Q13609 (M21-S305)
Gene ID:	1776
Molecular Weight:	Approximately 60.4 kDa

PROPERTIES

AA Sequence	M R I C S F N V R S F G E S K Q E D K N A M D V I V K V I K R C D I I L V M E I K D S N N R I C P I L M E K L N R N S R R G I T Y N Y V I S S R L G R N T Y K E Q Y A F L Y K E K L V S V K R S Y H Y H D Y Q D G D A D V F S R E P F V V W F Q S P H T A V K D F V I I P L H T T P E T S V K E I D E L V E V Y T D V K H R W K A E N F I F M G D F N A G C S Y V P K K A W K N I R L R T D P R F V W L I G D Q E D T T V K K S T N C A Y D R I V L R G Q E I V S S V V P K S N S V F D F Q K A Y K L T E E E A L D V S D H F P V E F K L Q S S R A F T N S K K S V T L R K K T K S K R S
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against solution in 10 mM Tris-HCl, 1 mM EDTA, 6% Trehalose, pH 8.0.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	DNASE1L3 protein possesses DNA hydrolytic activity, demonstrating proficiency in both single- and double-stranded DNA cleavage, resulting in the production of DNA fragments with 3'-OH ends. The protein can cleave chromatin to nucleosomal

units and exhibits activity on nucleosomal and liposome-coated DNA. It plays a crucial role in internucleosomal DNA fragmentation during apoptosis and necrosis, contributing to processes such as myogenic and neuronal differentiation, as well as BCR-mediated clonal deletion of self-reactive B cells. DNASE1L3 is active on chromatin in apoptotic cell-derived membrane-coated microparticles, thereby suppressing anti-DNA autoimmunity. Additionally, in collaboration with DNASE1, DNASE1L3 is essential for degrading neutrophil extracellular traps (NETs), composed mainly of DNA fibers released by neutrophils during inflammation. The degradation of intravascular NETs by DNASE1 and DNASE1L3 is crucial to prevent the formation of clots that could obstruct blood vessels and lead to organ damage following inflammation.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA