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DNASE1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5430

Product Information

Application	WB
Primary Accession	P24855
Other Accession	P00639
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31434
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	1773
Antigen Region	87-121
Other Names	Deoxyribonuclease-1, Deoxyribonuclease I, DNase I, Dornase alfa, DNASE1, DNL1, DRNI
Dilution	WB~~1:1000
Target/Specificity	This DNASE1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 87-121 amino acids from the Central region of human DNASE1.
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	DNASE1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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:11241278, PubMed:2251263, 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

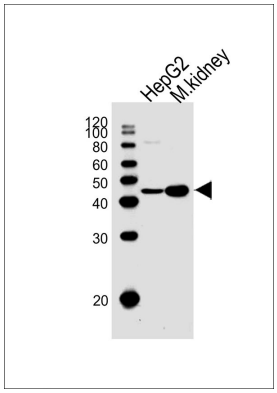
Background

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

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).

Images



All lanes : Anti-DNASE1 Antibody (Center) at 1:1000 dilution Lane 1: HepG2 whole cell lysates Lane 2: mouse kidney lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 31 kDa Blocking/Dilution buffer: 5% NFDM/TBST.