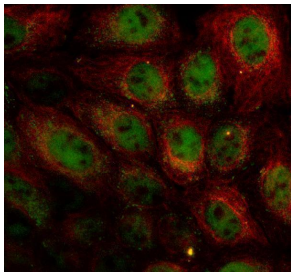
DNASE1L3 Antibody / Deoxyribonuclease gamma Antibody (FY13584)

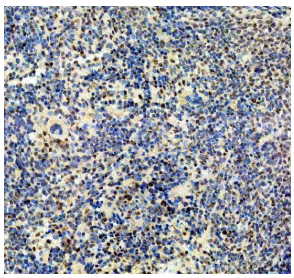
Catalog No.	Formulation	Size
FY13584	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

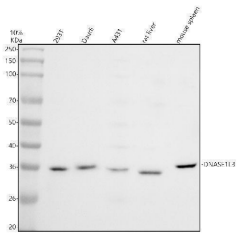
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q13609
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml ELISA: 0.1-0.5 ug/ml
Limitations	This DNASE1L3 Antibody / Deoxyribonuclease gamma Antibody is supplied exclusively for research use.



DNASE1L3 Antibody by IF in HaCaT cells. Immunofluorescence using Deoxyribonuclease gamma Antibody shows green nuclear and perinuclear signal in HaCaT keratinocytes, with red alpha-tubulin staining delineating the cytoplasmic microtubule network. The apparent nuclear enrichment is descriptive and does not establish the localization of the secreted mature protein. Cells underwent enzyme-mediated antigen retrieval for 15 minutes and blocking with 10% goat serum. Primary antibodies were incubated overnight at 4oC at 5 ug/mL for DNASE1L3, followed by Fluoro488 and Cy3 secondary antibodies at 1:500 for 30 minutes at 37oC.



DNASE1L3 Antibody by IHC in rat spleen tissue. Immunohistochemistry of paraffin-embedded rat spleen tissue using Deoxyribonuclease gamma Antibody shows brown staining in scattered splenic cells amid densely packed blue-stained lymphoid nuclei. Nuclei are counterstained blue with hematoxylin. Sections underwent heat-mediated antigen retrieval in EDTA buffer (pH 8.0), followed by blocking with 10% goat serum. Primary antibody was applied at 2 ug/mL overnight at 4oC, followed by a peroxidase-conjugated secondary antibody and DAB chromogenic detection.



DNASE1L3 Antibody by WB in human cell lines and rodent tissues. Western blot analysis using Deoxyribonuclease gamma Antibody detects a band near 36 kDa in human 293T (lane 1), Daudi (lane 2), A431 (lane 3), rat liver (lane 4), and mouse spleen (lane 5). The calculated molecular weight is approximately 35.5 kDa. Reduced samples containing 30 ug protein per lane were separated by 10% SDS-PAGE and transferred to nitrocellulose. Membranes were blocked with 5% nonfat milk and incubated with primary antibody at 0.5 ug/mL overnight at 4oC. An HRP-conjugated secondary antibody and chemiluminescent substrate were used for detection.

Description

DNASE1L3 Antibody / Deoxyribonuclease gamma Antibody detects DNASE1L3, a secreted nuclease involved in the degradation of extracellular DNA. DNA released from dying cells can persist in association with nucleosomes, microparticles, and other molecular structures. DNASE1L3 helps digest such material, contributing to the clearance of potentially immunostimulatory DNA from the extracellular environment. It belongs to the DNase I family but differs from DNASE1 in biochemical features and its ability to process certain forms of chromatin-associated DNA.

Efficient disposal of cellular debris is important for preventing inappropriate immune recognition of self-derived molecules. DNASE1L3 participates in this process by reducing the persistence of DNA-containing material that could otherwise be encountered by immune cells. Its activity has been associated with the handling of DNA in apoptotic microparticles and with the regulation of responses to extracellular chromatin. The relationship between nuclease activity and immune tolerance involves multiple cooperating pathways, including phagocytic clearance and receptors that sense nucleic acids. DNASE1L3 is one component of this larger system rather than a general suppressor of all immune signaling. The Deoxyribonuclease gamma Antibody designation refers to this same protein target.

Loss-of-function variants in DNASE1L3 can cause an inherited form of systemic lupus erythematosus or related autoimmune phenotypes. These observations support a causal connection between defective extracellular DNA clearance and loss of immune tolerance. DNASE1L3 has also been investigated in thrombotic and inflammatory conditions in which circulating DNA contributes to pathological processes. NSJ Bioreagents includes DNASE1L3 among proteins involved in extracellular nucleic acid metabolism and immune homeostasis. A DNASE1L3 Antibody provides a means of examining the molecular functions associated with DNASE1L3.

Explore related research targets in our Immunology Antibodies collection.

Application Notes

Users should optimize the working dilution of the DNASE1L3 Antibody / Deoxyribonuclease gamma Antibody for their specific experimental setup.

Immunogen

The DNASE1L3 Antibody was generated using e. coli-derived human DNASE1L3 recombinant protein (amino acids E33-H274).

Storage

Once reconstituted, refrigerate the DNASE1L3 Antibody at 4oC for no longer than one month. For extended storage, freeze aliquots at -20oC for up to six months and avoid repeated freeze-thaw cycles.

Alternate Names

DNASE1L3 antibody, Deoxyribonuclease gamma antibody, deoxyribonuclease 1L3 antibody, 1A4D4 antibody, Deoxyribonuclease I-like 3 antibody, DHP2 antibody, DNAS1L3 antibody

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