bs-7651R **[Primary Antibody]**

DNase I Rabbit pAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 1773 **SWISS:** P24855

Target: DNase I

Immunogen: KLH conjugated synthetic peptide derived from human DNase I: 101-200/282.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Deoxyribonuclease I gene is approximately 3.2 kb long with 9 exons separated by 8 introns. In the form of a bovine pancreatic enzyme preparation, it occupies an important place in the history of protein chemistry and enzymology: it was the first enzyme to be recognized as specific for DNA; it was the first DNase to be crystallized; and it was the first DNase for which a specific protein inhibitor was characterized. DNase I is a Ca2+ and Mg2+ dependant endonuclease. DNase I is synthesized in the pancreas and stored in zymogen granules. It has been used to reduce the viscosity of cystic fibrosis sputum. A DNase I-like enzyme appears to catalyze the degradation of chromatin to oligo- and mononucleosomes during apoptosis. A recent study has demonstrated an endonuclease with activity and antigenicity indistinguishable from DNase I in thymocytes, cells susceptible to apoptosis. DNase I is an endonuclease that hydrolyzes double-stranded or single stranded DNA preferentially at sites adjacent to pyrimidine nucleotides. The product of hydrolysis is a complex mixture of 5'-phosphate mononucleotides and oligonucleotides. In the presence of Mg ion, DNase I attacks each strand of DNA independently and the cleavage sites are random.

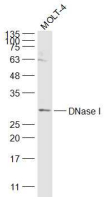
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

Reactivity: Human, Rat (predicted: Mouse, Rabbit, Pig, Chicken, Horse)

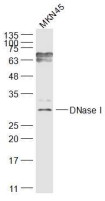
Predicted MW.: 29 kDa

Subcellular Location: Secreted ,Nucleus

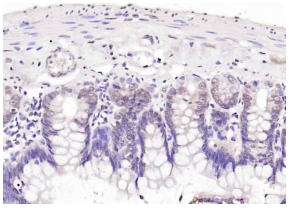
VALIDATION IMAGES



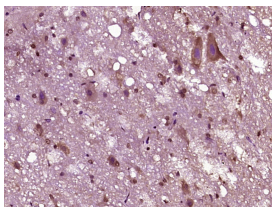
Sample: MOLT-4(Human) Cell Lysate at 30 ug Primary: Anti-DNase I (bs-7651R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 29 kD Observed band size: 29 kD



Sample: MKN45(Human) Cell Lysate at 30 ug Primary: Anti-DNase I (bs-7651R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 29 kD Observed band size: 29 kD



Paraformaldehyde-fixed, paraffin embedded (rat intestine); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (DNase I) Polyclonal Antibody, Unconjugated (bs-7651R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat spinal cord); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (DNase I) Polyclonal Antibody, Unconjugated (bs-7651R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

SELECTED CITATIONS

- **[IF=8.786]** Julia Elrod. et al. Murine scald models characterize the role of neutrophils and neutrophil extracellular traps in severe burns. FRONT IMMUNOL. 2023; 14: 1113948 IF ;Mouse. 36825027
- **[IF=5.6]** Antonia Kiwit. et al. The Dual Role of Neutrophil Extracellular Traps (NETs) in Sepsis and Ischemia-Reperfusion Injury: Comparative Analysis across Murine Models. INT J MOL SCI. 2024 Jan;25(7):3787 IF ;Mouse. 38612596