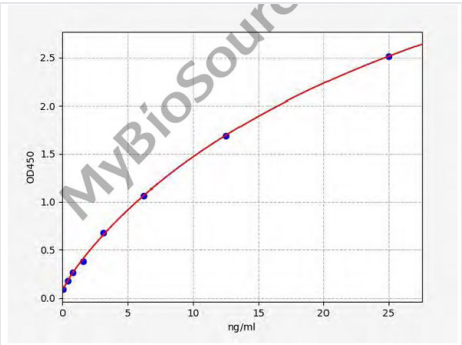
Deoxyribonuclease-1 (DNASE1) ELISA Kit for Rat

PRODUCT OVERVIEW

Product Name	Deoxyribonuclease-1 (Dnase1), ELISA Kit
Full Product Name	Rat Deoxyribonuclease-1 ELISA Kit
Product Gene Name	Dnase1 elisa kit
Product Synonym Names	Dnase1/DNase-I
Species Reactivity	Rat
Assay Type	Sandwich ELISA, Double Antibody
Samples	Serum, Plasma, Cell Culture Supernatant, cell or tissue lysate, Other liquid samples
Detection Range	0.391-25ng/ml
Sensitivity	0.234ng/ml
Specificity	This assay has high sensitivity and excellent specificity for detection of Dnase1. No significant cross-reactivity or interference between Dnase1 and analogues was observed.
Preparation and Storage	Store entire kit at 2-8C for short-term. For longer-term, please store the microplate & standard at -20C, while the remaining reagents can be stored at 2-8C
Inter-assay Precision	CV<10%
Intra-assay Precision	CV<8%
Molecular Weight	19,771 Da
OMIM	125505
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for Dnase1 elisa kit	Principle of the Assay: This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Capture antibody was pre-coated onto 96-well plates. And the biotin conjugated antibody was used as detection antibodies. The standards, test samples and biotin conjugated detection antibody were added to the wells subsequently, and washed with wash buffer. HRP-Streptavidin was added and unbound conjugates were washed away with wash buffer. TMB substrates were used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the target amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration of target can be calculated.
Other Notes	Small volumes of Dnase1 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for Dnase1 purchase	MBS762169 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Deoxyribonuclease-1 (Dnase1) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing Dnase1. The ELISA analytical biochemical technique of the MBS762169 kit is based on Dnase1 antibody-Dnase1 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect Dnase1 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, Dnase1. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of Dnase1 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for Dnase1. It may not necessarily be applicable to this product.

NCBI GI #	21361254
NCBI GeneID	1773
NCBI Accession #	NP_005214.2
UniProt Secondary Accession #	Q14UU9; Q14UV0; B4DV35
UniProt Related Accession #	P24855
GenBank Nucleotide #	NM_005223.3
NCBI Official Full Name	deoxyribonuclease-1
NCBI Official Synonym Full Names	deoxyribonuclease I
NCBI Official Symbol	DNASE1
NCBI Official Synonym Symbols	DNL1; DRNI
UniProt Protein Name	Deoxyribonuclease-1
UniProt Synonym Protein Names	Deoxyribonuclease I; DNase I; INN: Dornase alfa
Protein Family	Deoxyribonuclease
UniProt Gene Name	DNASE1
UniProt Synonym Gene Names	DNL1; DRNI; DNase I
UniProt Entry Name	DNAS1_HUMAN
NCBI Protein Information	deoxyribonuclease-1
NCBI Summary for Dnase1	This gene encodes a member of the DNase family. This protein is stored in the zymogen granules of the nuclear envelope and functions by cleaving DNA in an endonucleolytic manner. At least six autosomal codominant alleles have been characterized, DNASE1*1 through DNASE1*6, and the sequence of DNASE1*2 represented in this record. Mutations in this gene have been associated with systemic lupus erythematosus (SLE), an autoimmune disease. A recombinant form of this protein is used to treat the one of the symptoms of cystic fibrosis by hydrolyzing the extracellular DNA in sputum and reducing its viscosity. Alternate transcriptional splice variants of this gene have been observed but have not been thoroughly characterized. [provided by RefSeq, Jul 2008]

UniProt Comments for Dnase1	DNASE1: Among other functions, seems to be involved in cell death by apoptosis. Binds specifically to G-actin and blocks actin polymerization. Defects in DNASE1 are a cause of susceptibility to systemic lupus erythematosus (SLE). A chronic, inflammatory and often febrile multisystemic disorder of connective tissue. It affects principally the skin, joints, kidneys and serosal membranes. It is thought to represent a failure of the regulatory mechanisms of the autoimmune system. Belongs to the DNase I family. Protein type: Secreted; Motility/polarity/chemotaxis; EC 3.1.21.1; Secreted, signal peptide; Deoxyribonuclease Chromosomal Location of Human Ortholog: 16p13.3 Cellular Component: extracellular region; nuclear envelope; nucleus Molecular Function: actin binding; deoxyribonuclease I activity; protein binding Biological Process: apoptosis; DNA catabolic process Disease: Systemic Lupus Erythematosus
Research Articles on Dnase1	**1.** Val66Met in the BDNF gene and two SNPs, FokI and ApaI, in the VDR gene may potentially be associated with DED. Additionally, the association between DED and Val66Met may vary by depression status.
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