Dipeptidase 1 (DPEP1) ELISA Kit for Human

PRODUCT OVERVIEW

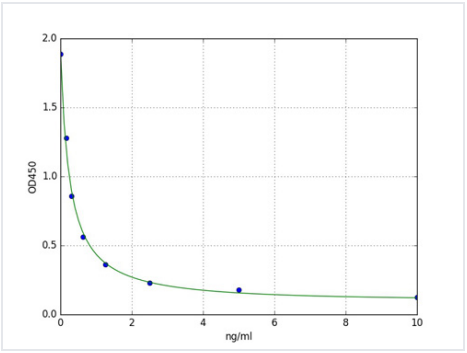
Product Name	Dipeptidase 1 (DPEP1), ELISA Kit
Full Product Name	Human Dipeptidase 1 ELISA Kit
Product Gene Name	DPEP1 elisa kit
Product Synonym Names	DPEP1/Renal dipeptidase/hRDP/Dehydropeptidase-I/Microsomal dipeptidase/MDP/RDP
Species Reactivity	Human
Assay Type	Competitive ELISA, Coated with Antigen
Samples	Serum, Plasma, Cell Culture Supernatant, cell or tissue lysate, Other liquid samples
Detection Range	0.156-10ng/ml
Sensitivity	0.094ng/ml
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
Molecular Weight	45,674 Da
OMIM	179780
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for DPEP1 elisa kit	Principle of the Assay||This ELISA kit uses Competitive-ELISA as the method. The microtiter plate provided in this kit has been pre-coated with an antibody specific to Human DPEP1. During the reaction,Human DPEP1 in the sample or standard competes with a fixed amount of biotin-labeled Human DPEP1 for sites on a pre-coated Monoclonal antibody specific to Human DPEP1. Excess conjugate and unbound sample or standard are washed from the plate, and HRP-Streptavidin (SABC) is added to each microplate well and incubated. Then a TMB substrate solution is added to each well. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm. The concentration of Human DPEP1 in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Other Notes	Small volumes of DPEP1 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 DPEP1 purchase	MBS765214 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Dipeptidase 1 (DPEP1) 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 DPEP1. The ELISA analytical biochemical technique of the MBS765214 kit is based on DPEP1 antibody-DPEP1 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect DPEP1 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, DPEP1. 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 Data & Standard Curve

Results of a typical standard run of a Human DPEP1 ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment. (N/A=not applicable)

X	pg/ml	0	156	312.5	625	1250	2500	5000	10000
Y	OD450	2.419	1.930	1.719	1.315	0.914	0.646	0.444	0.344

Typical Testing Data of DPEP1 elisa kit



Typical Standard Curve of DPEP1 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for DPEP1. It may not necessarily be applicable to this product.

NCBI GI #	189458885
NCBI GeneID	1800
NCBI Accession #	NP_001121613.1
UniProt Secondary Accession #	Q96AK2; D3DX80
UniProt Related Accession #	P16444
GenBank Nucleotide #	NM_001128141.2
NCBI Official Full Name	dipeptidase 1
NCBI Official Synonym Full Names	dipeptidase 1 (renal)
NCBI Official Symbol	DPEP1
NCBI Official Synonym Symbols	MDP; RDP; MBD1
UniProt Protein Name	Dipeptidase 1
UniProt Synonym Protein Names	Dehydropeptidase-I; Microsomal dipeptidase; Renal dipeptidase; hRDP
Protein Family	Dipeptidase
UniProt Gene Name	DPEP1
UniProt Synonym Gene Names	MDP; RDP; hRDP
UniProt Entry Name	DPEP1_HUMAN
NCBI Protein Information	dipeptidase 1
NCBI Summary for DPEP1	The protein encoded by this gene is a kidney membrane enzyme involved in the metabolism of glutathione and other similar proteins by dipeptide hydrolysis. The encoded protein is known to regulate leukotriene activity by catalyzing the conversion of leukotriene D4 to leukotriene E4. This protein uses zinc as a cofactor and acts as a disulfide-linked homodimer. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jan 2012]

UniProt Comments for DPEP1	DPEP1: Hydrolyzes a wide range of dipeptides. Implicated in the renal metabolism of glutathione and its conjugates. Converts leukotriene D4 to leukotriene E4; it may play an important role in the regulation of leukotriene activity. Belongs to the peptidase M19 family. Protein type: EC 3.4.13.19; Membrane protein, GPI anchor; Protease Chromosomal Location of Human Ortholog: 16q24.3 Cellular Component: apical part of cell; apical plasma membrane; extracellular space; microvillus membrane; plasma membrane Molecular Function: caspase inhibitor activity; dipeptidyl-peptidase activity; metalloexopeptidase activity; protein binding; zinc ion binding Biological Process: antibiotic metabolic process; arachidonic acid metabolic process; glutathione metabolic process; homocysteine metabolic process; leukotriene metabolic process; negative regulation of apoptosis; negative regulation of caspase activity; negative regulation of cell migration; proteolysis; xenobiotic metabolic process
Research Articles on DPEP1	**1.** Dipeptidase 1 has been identified as an excellent marker of high-grade IEN and CRC, and may thus be applied for screening of early neoplastic lesions and for prognostic stratification.
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