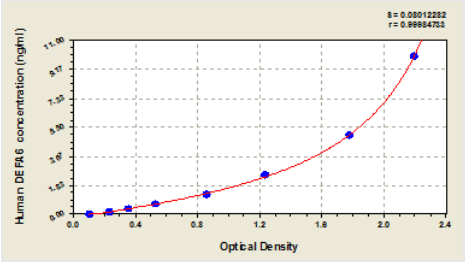
Defensin, Alpha 6, Paneth Cell-Specific (DEFA6) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	defensin, alpha 6, Paneth cell-specific (DEFA6), ELISA Kit
Full Product Name	Human Defensin-6, DEFA6 ELISA Kit
Product Gene Name	DEFA6 elisa kit
Product Synonym Names	Human Defensin-6 (DEFA6) ELISA kit; DEF6; HD-6; defensin 6; defensin; alpha 6; defensin; alpha 6; Paneth cell-specific
Species Reactivity	Human
Assay Type	Sandwich
Samples	Serum, plasma, tissue homogenates
Detection Range	0.156 ng/ml -10 ng/ml.
Sensitivity	The minimum detectable dose of human DEFA6 is typically less than 0.039 ng/ml. The sensitivity of this assay, or Lower Limit of Detection (LLD) was defined as the lowest protein concentration that could be differentiated from zero. It was determined the mean O.D value of 20 replicates of the zero standard added by their three standard deviations.
Specificity	This assay has high sensitivity and excellent specificity for detection of human DEFA6. No significant cross-reactivity or interference between human DEFA6 and analogues was observed.
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.
Inter-assay Precision	Inter-assay Precision (Precision between assays): CV%<10%. Three samples of known concentration were tested in twenty assays to assess.
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV%<8%. Three samples of known concentration were tested twenty times on one plate to assess.
Molecular Weight	10,975 Da
OMIM	600471
3D Structure	ModBase 3D Structure for Q01524
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for DEFA6 elisa kit	**Principle of the assay:** This assay employs the quantitative sandwich enzyme immunoassay technique. Antibody specific for DEFA6 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any DEFA6 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for DEFA6 is added to the wells. After washing, avidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of DEFA6 bound in the initial step. The color development is stopped and the intensity of the color is measured.
Other Notes	Small volumes of DEFA6 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 DEFA6 purchase	MBS944129 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the defensin, alpha 6, Paneth cell-specific (DEFA6) 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 DEFA6. The ELISA analytical biochemical technique of the MBS944129 kit is based on DEFA6 antibody-DEFA6 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect DEFA6 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, DEFA6. 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 DEFA6 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for DEFA6. It may not necessarily be applicable to this product.

NCBI GI #	4503305
NCBI GeneID	1671
NCBI Accession #	NP_001917.1
UniProt Primary Accession #	Q01524
UniProt Secondary Accession #	Q6EZF9
UniProt Related Accession #	Q01524
GenBank Nucleotide #	NM_001926.3
NCBI Official Full Name	defensin-6 preproprotein
NCBI Official Synonym Full Names	defensin, alpha 6, Paneth cell-specific
NCBI Official Symbol	DEFA6
NCBI Official Synonym Symbols	DEF6; HD-6
UniProt Protein Name	Defensin-6
UniProt Synonym Protein Names	Defensin, alpha 6
Protein Family	Alpha-defensin
UniProt Gene Name	DEFA6
UniProt Synonym Gene Names	DEF6
UniProt Entry Name	DEF6_HUMAN
NCBI Protein Information	defensin-6; defensin 6
NCBI Summary for DEFA6	Defensins are a family of microbicidal and cytotoxic peptides thought to be involved in host defense. They are abundant in the granules of neutrophils and also found in the epithelia of mucosal surfaces such as those of the intestine, respiratory tract, urinary tract, and vagina. Members of the defensin family are highly similar in protein sequence and distinguished by a conserved cysteine motif. Several alpha defensin genes appear to be clustered on chromosome 8. The protein encoded by this gene, defensin, alpha 6, is highly expressed in the secretory granules of Paneth cells of the small intestine, and likely plays a role in host defense of human bowel. [provided by RefSeq, Jul 2008]

UniProt Comments for DEFA6	defensin, alpha 6: Has very low antimicrobial activity against Gram- negative and Gram-positive bacteria. May protect cells against infection with HIV-1. Belongs to the alpha-defensin family. Protein type: Secreted, signal peptide; Secreted Chromosomal Location of Human Ortholog: 8p23.1 Cellular Component: extracellular space; Golgi lumen; extracellular region Biological Process: killing of cells of another organism; antibacterial humoral response; innate immune response; defense response to fungus
Research Articles on DEFA6	**1.** In the meta-analysis, DEFA6 rs13275170 and DEFB1 rs2738169 had both a 1.3-fold increased odds ratio for gastric cancer.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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