Cytokeratin 17 (CK-17) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Cytokeratin 17 (CK-17), ELISA Kit
Full Product Name	Human Cytokeratin 17 (CK-17) ELISA Kit
Product Gene Name	CK-17 elisa kit
Product Synonym Names	K17; PC; PC2; PCHC1; cytokeratin-17
Species Reactivity	Human
Assay Type	Sandwich
Samples	Serum, Plasma, Other biological fluids
Specificity	This assay has high sensitivity and excellent specificity for detection of Human KRT17. No significant cross-reactivity or interference between Human KRT17 and analogues was observed.
Preparation and Storage	Store at 2-8 degree C.
Molecular Weight	48,106 Da
OMIM	Z19574 Genomic DNA
3D Structure	ModBase 3D Structure for Q04695
Sample Volume	1-200 uL
Precision	Intra-assay Precision (Precision within an assay) Three samples of known concentration were tested twenty times on one plate to assess intra-assay precision. Inter-assay Precision (Precision between assays) Three samples of known concentration were tested in forty separate assays to assess inter-assay precision. CV (%) = SD/meanX100 Intra-Assay: CV Inter-Assay: CV
Detection Wavelength	450 nm
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for CK-17 elisa kit	Principle of the Assay: This assay employs a two-site sandwich ELISA to quantitate KRT17 in samples. An antibody specific for KRT17 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyKRT17 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for KRT17 is added to the wells. After washing, Streptavidin 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 KRT17 bound in the initial step. The color development is stopped and the intensity of the color is measured.
Other Notes	Small volumes of CK-17 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 CK-17 purchase	MBS284545 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Cytokeratin 17 (CK-17) 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 CK-17. The ELISA analytical biochemical technique of the MBS284545 kit is based on CK-17 antibody-CK-17 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CK-17 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CK-17. 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(%).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CK-17. It may not necessarily be applicable to this product.

NCBI GI #	4557701
NCBI GeneID	3872
NCBI Accession #	NP_000413.1
UniProt Primary Accession #	Q04695
UniProt Secondary Accession #	Q6IP98; Q8N1P6; A5Z1M9; A5Z1N0; A5Z1N1; A5Z1N2; A6NDV6; A6NKQ2
UniProt Related Accession #	Q04695
GenBank Nucleotide #	NM_000422.2
NCBI Official Full Name	keratin, type I cytoskeletal 17
NCBI Official Synonym Full Names	keratin 17
NCBI Official Symbol	KRT17
NCBI Official Synonym Symbols	PC; K17; PC2; 39.1; CK-17; PCHC1
UniProt Protein Name	Keratin, type I cytoskeletal 17
UniProt Synonym Protein Names	39.1; Cytokeratin-17; CK-17; Keratin-17; K17
Protein Family	Keratin
UniProt Gene Name	KRT17
UniProt Synonym Gene Names	CK-17; K17
NCBI Protein Information	keratin, type I cytoskeletal 17
NCBI Summary for CK-17	This gene encodes the type I intermediate filament chain keratin 17, expressed in nail bed, hair follicle, sebaceous glands, and other epidermal appendages. Mutations in this gene lead to Jackson-Lawler type pachyonychia congenita and steatocystoma multiplex. [provided by RefSeq, Aug 2008]
UniProt Comments for CK-17	K17: a type I cytoskeletal keratin. The keratins are intermediate filament proteins responsible for the structural integrity of epithelial cells and are subdivided into cytokeratins and hair keratins. There are two types of cytoskeletal and microfibrillar keratin: type I (acidic; 40-55 kDa) [K9 to K20] and type II (neutral to basic; 56-70 kDa) [K1 to K8]. Both a basic and an acidic keratin are required for filament assembly. Generally associates with K6. Protein type: Cytoskeletal Chromosomal Location of Human Ortholog: 17q21.2 Cellular Component: cell periphery; cytosol; extracellular exosome; intermediate filament; intermediate filament cytoskeleton Molecular Function: MHC class II protein binding; MHC class II receptor activity; protein binding; structural constituent of cytoskeleton Biological Process: cornification; epidermis development; hair follicle morphogenesis; intermediate filament organization; keratinization; positive regulation of cell growth; positive regulation of hair follicle development; positive regulation of translation; signal transduction Disease: Pachyonychia Congenita 2; Steatocystoma Multiplex
Research Articles on CK-17	**1.** Krt17 was demonstrated to contribute to areca nut-induced oral malignancy

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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