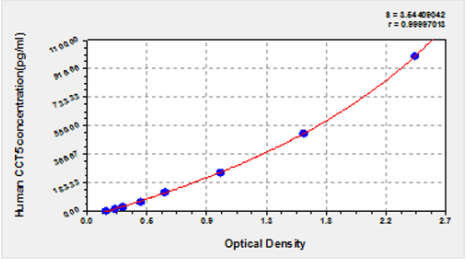
Chaperonin Containing TCP1, Subunit 5 (Epsilon) (CCT5) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	chaperonin containing TCP1, subunit 5 (epsilon) (CCT5), ELISA Kit
Full Product Name	Human T-complex protein 1 subunit epsilon, CCT5 ELISA Kit
Product Gene Name	CCT5 elisa kit
Product Synonym Names	Human T-complex protein 1 subunit epsilon (CCT5) ELISA kit; CCT-epsilon; CCTE; KIAA0098; TCP-1-epsilon; T-complex protein 1; epsilon subunit; chaperonin containing TCP1; subunit 5 (epsilon)
Species Reactivity	Human
Assay Type	Sandwich
Samples	Serum, plasma, tissue homogenates, Cell lysates
Detection Range	15.6 pg/ml-1000 pg/ml.
Sensitivity	The minimum detectable dose of human CCT5 is typically less than 3.9 pg/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 CCT5. No significant cross-reactivity or interference between human CCT5 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	59,671 Da
OMIM	610150
3D Structure	ModBase 3D Structure for P48643
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for CCT5 elisa kit	**Principle of the assay:** This assay employs the quantitative sandwich enzyme immunoassay technique. Antibody specific for CCT5 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any CCT5 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for CCT5 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 CCT5 bound in the initial step. The color development is stopped and the intensity of the color is measured.
Other Notes	Small volumes of CCT5 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 CCT5 purchase	MBS930379 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the chaperonin containing TCP1, subunit 5 (epsilon) (CCT5) 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 CCT5. The ELISA analytical biochemical technique of the MBS930379 kit is based on CCT5 antibody-CCT5 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CCT5 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CCT5. 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 CCT5 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CCT5. It may not necessarily be applicable to this product.

NCBI GI #	24307939
NCBI GeneID	22948
NCBI Accession #	NP_036205.1
UniProt Primary Accession #	P48643
UniProt Secondary Accession #	A8JZY8; A8K2X8; B4DYD8
UniProt Related Accession #	P48643
GenBank Nucleotide #	NM_012073.3
NCBI Official Full Name	T-complex protein 1 subunit epsilon
NCBI Official Synonym Full Names	chaperonin containing TCP1, subunit 5 (epsilon)
NCBI Official Symbol	CCT5
NCBI Official Synonym Symbols	CCTE; HEL-S-69; CCT-epsilon; TCP-1-epsilon
UniProt Protein Name	T-complex protein 1 subunit epsilon
UniProt Synonym Protein Names	CCT-epsilon
Protein Family	T-complex protein
UniProt Gene Name	CCT5
UniProt Synonym Gene Names	CCTE; KIAA0098; TCP-1-epsilon
UniProt Entry Name	TCPE_HUMAN
NCBI Protein Information	T-complex protein 1 subunit epsilon; epididymis secretory protein Li 69; T-complex protein 1, epsilon subunit
NCBI Summary for CCT5	The protein encoded by this gene is a molecular chaperone that is a member of the chaperonin containing TCP1 complex (CCT), also known as the TCP1 ring complex (TRiC). This complex consists of two identical stacked rings, each containing eight different proteins. Unfolded polypeptides enter the central cavity of the complex and are folded in an ATP-dependent manner. The complex folds various proteins, including actin and tubulin. Alternate transcriptional splice variants of this gene have been observed but have not been thoroughly characterized. In addition, three pseudogenes of this gene have been identified. [provided by RefSeq, Jun 2010]

UniProt Comments for CCT5	CCT-epsilon: Molecular chaperone; assists the folding of proteins upon ATP hydrolysis. As part of the BBS/CCT complex may play a role in the assembly of BBSome, a complex involved in ciliogenesis regulating transports vesicles to the cilia. Known to play a role, in vitro, in the folding of actin and tubulin. Defects in CCT5 are the cause of hereditary sensory neuropathy autosomal recessive with spastic paraplegia (HSNSP). The disease is characterized by spastic paraplegia and progressive distal sensory neuropathy leading to mutilating ulcerations of the upper and lower limbs. Belongs to the TCP-1 chaperonin family. Protein type: Chaperone Chromosomal Location of Human Ortholog: 5p15.2 Cellular Component: chaperonin-containing T-complex; microtubule; centrosome; cytoplasm; nucleolus; cytosol Molecular Function: protein binding; unfolded protein binding; beta-tubulin binding; G-protein beta-subunit binding; ATP binding Biological Process: 'de novo' posttranslational protein folding; cellular protein metabolic process; protein folding; binding of sperm to zona pellucida; response to virus Disease: Neuropathy, Hereditary Sensory, With Spastic Paraplegia, Autosomal Recessive
Research Articles on CCT5	**1.** Both CCT4 and CCT5 homo-oligomers have the property of forming 8-fold double rings absent the other subunits, and these complexes carry out chaperonin reactions without other partner subunits.
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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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