Uroplakin-3a (UPK3A) ELISA Kit for Mouse

PRODUCT OVERVIEW

Product Name	Uroplakin-3a (UPK3A), ELISA Kit
Full Product Name	Mouse Uroplakin-3a (UPK3A) ELISA Kit
Product Gene Name	UPK3A elisa kit
Product Synonym Names	CTA-268H5.10; MGC119178; UP3A; UPIII; UPIIIA; UPK3; uroplakin III
Species Reactivity	Mouse
Assay Type	Sandwich
Samples	Serum, Plasma, Other biological fluids
Specificity	This assay has high sensitivity and excellent specificity for detection of Mouse UPK3A. No significant cross-reactivity or interference between Mouse UPK3A and analogues was observed.
Preparation and Storage	Store at 2-8 degree C.
Molecular Weight	30,990 Da
3D Structure	ModBase 3D Structure for Q9JKX8
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 UPK3A elisa kit	Principle of the Assay: This assay employs a two-site sandwich ELISA to quantitate UPK3A in samples. An antibody specific for UPK3A has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyUPK3A present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for UPK3A 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 UPK3A bound in the initial step. The color development is stopped and the intensity of the color is measured.
Other Notes	Small volumes of UPK3A 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 UPK3A purchase	MBS285309 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Uroplakin-3a (UPK3A) 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 UPK3A. The ELISA analytical biochemical technique of the MBS285309 kit is based on UPK3A antibody-UPK3A antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect UPK3A antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, UPK3A. 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 UPK3A. It may not necessarily be applicable to this product.

NCBI GI #	251823972
NCBI GeneID	22270
NCBI Accession #	NP_075967.2
UniProt Primary Accession #	Q9JKX8
UniProt Secondary Accession #	Q27QV3
UniProt Related Accession #	Q9JKX8
GenBank Nucleotide #	NM_023478.2
NCBI Official Full Name	uroplakin-3a
NCBI Official Synonym Full Names	uroplakin 3A
NCBI Official Symbol	Upk3a
NCBI Official Synonym Symbols	UP3a; Upk3; UPIII; 1110017C07Rik
UniProt Protein Name	Uroplakin-3a
UniProt Synonym Protein Names	Uroplakin III; UPIII
Protein Family	Uroplakin
UniProt Gene Name	Upk3a
UniProt Synonym Gene Names	Upk3; UP3a; UPIII
NCBI Protein Information	uroplakin-3a
UniProt Comments for UPK3A	UPK3A: Component of the asymmetric unit membrane (AUM); a highly specialized biomembrane elaborated by terminally differentiated urothelial cells. May play an important role in AUM-cytoskeleton interaction in terminally differentiated urothelial cells. It also contributes to the formation of urothelial glycocalyx which may play an important role in preventing bacterial adherence. Defects in UPK3A are a cause of renal adysplasia (RADYS); also known as renal agenesis or renal aplasia. Renal agenesis refers to the absence of one (unilateral) or both (bilateral) kidneys at birth. Bilateral renal agenesis belongs to a group of perinatally lethal renal diseases, including severe bilateral renal dysplasia, unilateral renal agenesis with contralateral dysplasia and severe obstructive uropathy. Belongs to the uroplakin-3 family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, integral Chromosomal Location of Human Ortholog: 15|15 E2 Cellular Component: apical plasma membrane; endoplasmic reticulum; integral component of membrane; membrane Molecular Function: protein binding Biological Process: cell morphogenesis; epithelial cell differentiation; kidney development; potassium ion homeostasis; sodium ion homeostasis; urea transport; urinary bladder development; water transport
Research Articles on UPK3A	**1.** U-CCs (Uroplakin3a expressing cells)proliferate and generate CCs and ciliated cells in uninjured airways long-term and, like v-CCs, after Nap. U-CCs have a higher propensity to generate ciliated cells than non-U-CCs
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.

Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
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.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/upk3a-mouse-elisa-kits/uroplakin-3a/285309