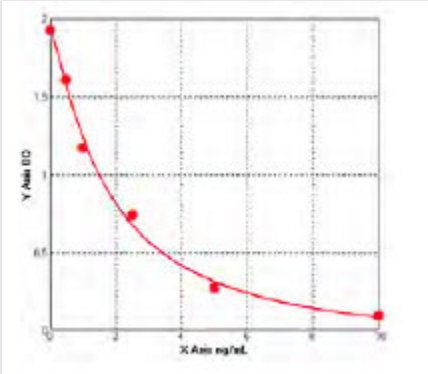
Beta Sarcoglycan (SGCB) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	beta sarcoglycan (SGCB), ELISA Kit
Full Product Name	Human beta sarcoglycan (SGCB) ELISA Kit
Product Gene Name	SGCB elisa kit
Product Synonym Gene Name	SGCB
Product Synonym Names	Human b sarcoglycan (SGCB) ELISA Kit
Species Reactivity	Human
Assay Type	Quantitative Competitive
Samples	Serum, plasma, cell culture supernatants, body fluid and tissue homogenate
Sensitivity	0.1 ng/mL
Specificity	This assay has high sensitivity and excellent specificity for detection of SGCB. No significant cross-reactivity or interference between SGCB and analogues was observed. NOTE: Limited by current skills and knowledge, it is impossible for us to complete the cross-reactivity detection between SGCB and all the analogues, therefore, cross reaction may still exist in some cases.
Preparation and Storage	Store all reagents at 2-8 degree C.
Molecular Weight	34,777 Da
OMIM	gene 604286
Sample Preparation	We suggest pre-experimenting with neat (undiluted) samples, 1:2 or 1:4 dilutions. Please avoid diluting your samples more than 1:10 as it would exceed the dilution limit set for this kit. If the expected concentration of the target is beyond the detection range of the kit, please contact our technical support team
Product Categories/Family for SGCB elisa kit	Signal Transduction
ISO Certification	Manufactured in an ISO 13485:2016 Certified Laboratory.
Related Product Information for SGCB elisa kit	Intended Uses: This SGCB ELISA kit is a 1.5 hour solid-phase ELISA designed for the quantitative determination of HumanSGCB. This ELISA kit for research use only! Principle of the Assay: SGCB ELISA kit applies the competitive enzyme immunoassay technique utilizing a polyclonal anti-SGCB antibody and an SGCB-HRP conjugate. The assay sample and buffer are incubated together with SGCB-HRP conjugate in pre-coated plate for one hour. After the incubation period, the wells are decanted and washed five times. The wells are then incubated with a substrate for HRP enzyme. The product of the enzyme-substrate reaction forms a blue colored complex. Finally, a stop solution is added to stop the reaction, which will then turn the solution yellow. The intensity of color is measured spectrophotometrically at 450nm in a microplate reader. The intensity of the color is inversely proportional to the SGCB concentration since SGCB from samples and SGCB-HRP conjugate compete for the anti-SGCB antibody binding site. Since the number of sites is limited, as more sites are occupied by SGCB from the sample, fewer sites are left to bind SGCB-HRP conjugate. A standard curve is plotted relating the intensity of the color (O.D.) to the concentration of standards. The SGCB concentration in each sample is interpolated from this standard curve.
Other Notes	Small volumes of SGCB 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 SGCB purchase	MBS7233681 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the beta sarcoglycan (SGCB) 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 SGCB. The ELISA analytical biochemical technique of the MBS7233681 kit is based on SGCB antibody-SGCB antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect SGCB antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, SGCB. 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 SGCB elisa kit

ADDITIONAL DETAILS

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

NCBI GI #	4506913
NCBI GeneID	6443
NCBI Accession #	NP_000223.1
UniProt Secondary Accession #	O00661
UniProt Related Accession #	Q16585
GenBank Nucleotide #	NM_000232.4
NCBI Official Full Name	beta-sarcoglycan
NCBI Official Synonym Full Names	sarcoglycan, beta (43kDa dystrophin-associated glycoprotein)
NCBI Official Symbol	SGCB
NCBI Official Synonym Symbols	A3b; SGC; LGMD2E
UniProt Protein Name	Beta-sarcoglycan
UniProt Synonym Protein Names	43 kDa dystrophin-associated glycoprotein; 43DAG; A3b
Protein Family	Beta-sarcoglycan
UniProt Gene Name	SGCB
UniProt Synonym Gene Names	Beta-SG; 43DAG
UniProt Entry Name	SGCB_HUMAN
NCBI Protein Information	beta-sarcoglycan; 43DAG; beta-SG; 43 kDa dystrophin-associated glycoprotein; limb girdle muscular dystrophy 2E (non-linked families); beta-sarcoglycan(43kD dystrophin-associated glycoprotein)
NCBI Summary for SGCB	This gene encodes a member of the sarcoglycan family. Sarcoglycans are transmembrane components in the dystrophin-glycoprotein complex which help stabilize the muscle fiber membranes and link the muscle cytoskeleton to the extracellular matrix. Mutations in this gene have been associated with limb-girdle muscular dystrophy.[provided by RefSeq, Oct 2008]

UniProt Comments for SGCB	SGCB: Component of the sarcoglycan complex, a subcomplex of the dystrophin-glycoprotein complex which forms a link between the F-actin cytoskeleton and the extracellular matrix. Defects in SGCB are the cause of limb-girdle muscular dystrophy type 2E (LGMD2E). LGMD2E is an autosomal recessive disorder. Belongs to the sarcoglycan beta/delta/gamma/zeta family. Protein type: Dystrophin complex; Membrane protein, integral Chromosomal Location of Human Ortholog: 4q12 Cellular Component: dystrophin-associated glycoprotein complex; cytoskeleton; integral to plasma membrane; cytoplasm; sarcoglycan complex; sarcolemma Biological Process: muscle development; cardiac muscle cell development; muscle fiber development Disease: Muscular Dystrophy, Limb-girdle, Type 2e
Research Articles on SGCB	**1.** The limb-girdle muscular dystrophy patients with beta-sarcoglycan deficient LGMD2E do not enable an accurate prediction of the genotype.
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