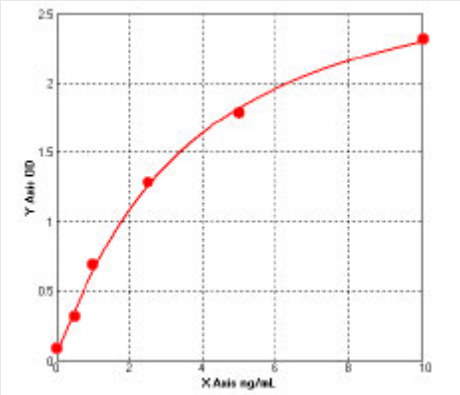
Actin Beta (ACTb) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Actin beta (ACTb), ELISA Kit
Full Product Name	Human Actin beta ELISA Kit
Product Gene Name	ACTb elisa kit
Product Synonym Gene Name	ACTb
Product Synonym Names	Human Actin b ELISA Kit
Species Reactivity	Human
Assay Type	Quantitative Sandwich
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 BACT. No significant cross-reactivity or interference between BACT and analogues was observed. NOTE: Limited by current skills and knowledge, it is impossible for us to complete the cross-reactivity detection between BACT 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	41,737 Da
OMIM	607371
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 ACTb elisa kit	Cell Biology
ISO Certification	Manufactured in an ISO 13485:2016 Certified Laboratory.
Related Product Information for ACTb elisa kit	Intended Uses: This BACT ELISA kit is a 1.5 hour solid-phase ELISA designed for the quantitative determination of Human BACT. This ELISA kit for research use only, not for therapeutic or test applications! Principle of the Assay: BACT ELISA kit applies the quantitative sandwich enzyme immunoassay technique. The microtiter plate has been pre-coated with a monoclonal antibody specific for BACT. Standards or samples are then added to the microtiter plate wells and BACT if present, will bind to the antibody pre-coated wells. In order to quantitatively determine the amount of BACT present in the sample, a standardized preparation of horseradish peroxidase (HRP)-conjugated polyclonal antibody, specific for BACT are added to each well to "sandwich" the BACT immobilized on the plate. The microtiter plate undergoes incubation, and then the wells are thoroughly washed to remove all unbound components. Next, substrate solutions are added to each well. The enzyme (HRP) and substrate are allowed to react over a short incubation period. Only those wells that contain BACT and enzyme-conjugated antibody will exhibit a change in color. The enzyme-substrate reaction is terminated by addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm. A standard curve is plotted relating the intensity of the color (O.D.) to the concentration of standards. The BACT concentration in each sample is interpolated from this standard curve.
Other Notes	Small volumes of ACTb 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 ACTb purchase	MBS726697 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Actin beta (ACTb) 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 ACTb. The ELISA analytical biochemical technique of the MBS726697 kit is based on ACTb antibody-ACTb antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect ACTb antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, ACTb. 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 ACTb elisa kit

ADDITIONAL DETAILS

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

NCBI GI #	117167827
NCBI GeneID	60
NCBI Accession #	AAI13037.1
UniProt Secondary Accession #	P02570; P70514; P99021; Q11211; Q64316; Q75MN2; Q96B34; Q96HG5
UniProt Related Accession #	P60709
NCBI Official Full Name	ACTB protein, partial
NCBI Official Synonym Full Names	actin, beta
NCBI Official Symbol	ACTB
NCBI Official Synonym Symbols	BRWS1; PS1TP5BP1
UniProt Protein Name	Actin, cytoplasmic 1
UniProt Synonym Protein Names	Beta-actinCleaved into the following chain:Actin, cytoplasmic 1, N-terminally processed
Protein Family	Actin
UniProt Gene Name	ACTB
UniProt Entry Name	ACTB_HUMAN
NCBI Protein Information	actin, cytoplasmic 1; beta cytoskeletal actin; PS1TP5-binding protein 1
NCBI Summary for ACTb	This gene encodes one of six different actin proteins. Actins are highly conserved proteins that are involved in cell motility, structure, and integrity. This actin is a major constituent of the contractile apparatus and one of the two nonmuscle cytoskeletal actins. [provided by RefSeq, Jul 2008]

UniProt Comments for ACTb	ACTB: Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. Polymerization of globular actin (G-actin) leads to a structural filament (F-actin) in the form of a two-stranded helix. Each actin can bind to 4 others. Identified in a mRNP granule complex, at least composed of ACTB, ACTN4, DHX9, ERG, HNRNPA1, HNRNPA2B1, HNRNPAB, HNRNPD, HNRNPL, HNRNPR, HNRNPU, HSPA1, HSPA8, IGF2BP1, ILF2, ILF3, NCBP1, NCL, PABPC1, PABPC4, PABPN1, RPLP0, RPS3, RPS3A, RPS4X, RPS8, RPS9, SYNCRIP, TROVE2, YBX1 and untranslated mRNAs. Component of the BAF complex, which includes at least actin (ACTB), ARID1A, ARID1B/BAF250, SMARCA2, SMARCA4/BRG1, ACTL6A/BAF53, ACTL6B/BAF53B, SMARCE1/BAF57 SMARCC1/BAF155, SMARCC2/BAF170, SMARCB1/SNF5/INI1, and one or more of SMARCD1/BAF60A, SMARCD2/BAF60B, or SMARCD3/BAF60C. In muscle cells, the BAF complex also contains DPF3. Found in a complex with XPO6, Ran, ACTB and PFN1. Component of the MLL5-L complex, at least composed of MLL5, STK38, PPP1CA, PPP1CB, PPP1CC, HCFC1, ACTB and OGT. Interacts with XPO6 and EMD. Interacts with ERBB2. Interacts with GCET2. Belongs to the actin family. Protein type: Motility/polarity/chemotaxis; Cytoskeletal Chromosomal Location of Human Ortholog: 7p22 Cellular Component: cortical cytoskeleton; extracellular space; NuA4 histone acetyltransferase complex; protein complex; focal adhesion; postsynaptic density; cytosol; ribonucleoprotein complex; nucleoplasm; cytoskeleton; membrane; axon; cytoplasm; nuclear chromatin; plasma membrane Molecular Function: protein binding; nucleosomal DNA binding; structural constituent of cytoskeleton; kinesin binding; Tat protein binding; nitric-oxide synthase binding; protein kinase binding; ATP binding Biological Process: intercellular junction assembly and maintenance; axon guidance; establishment and/or maintenance of chromatin architecture; protein folding; retinal homeostasis; 'de novo' posttranslational protein folding; cellular protein metabolic process; substantia nigra development; ATP-dependent chromatin remodeling; ephrin receptor signaling pathway; innate immune response; vascular endothelial growth factor receptor signaling pathway; cell motility; blood coagulation Disease: Dystonia, Juvenile-onset; Baraitser-winter Syndrome 1
Research Articles on ACTb	**1.** Taken together, these findings indicate that actin filament dynamics are dispensable for HIV-1 Gag assembly at the plasma membrane of HeLa cells.
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/actb-human-elisa-kits/actin-beta/726697