

Human Heat Shock Protein 47 (HSP47) ELISA Kit | HSP47 elisa kit

Human Heat Shock Protein 47 (HSP47) Mini Samples ELISA Kit

CATALOG #
AAA161606

REACTIVITY
Human

PRODUCT SYNONYMS

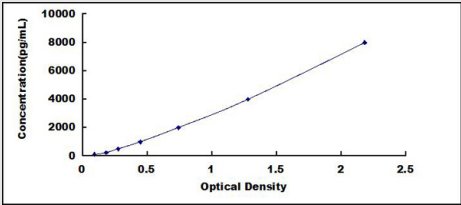
Heat Shock Protein 47 (HSP47); Human Heat Shock Protein 47 (HSP47) Mini Samples ELISA Kit; HSP47 Mini-sample ELISA kit (Human); CBP2; AsTP3; CBP1; PIG14; RA-A47; SERPINH1; SERPINH2; Colligen; Gp46; Serpin Peptidase Inhibitor Clade H Member 1; Heat Shock Protein 47; Collagen Binding Protein 2; HSP47 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This assay has high sensitivity and excellent specificity for detection of Mini Samples Heat Shock Protein 47 (HSP47). No significant cross-reactivity or interference between Mini Samples Heat Shock Protein 47 (HSP47) and analogues was observed. Reactive with Human HSP47/Heat Shock Protein 47
Assay Type	Double-antibody Sandwich
Samples	Serum, Plasma, Tissue homogenates, Cell lysates, Cell culture supernates and other biological fluids
Detection Method	Colormetric
Featured Series	ME kit
Detection Range	125-8,000pg/mL
Sensitivity	50pg/mL
Sample Size	15-25uL
Assay Time	3h
Function	Detects protein (micro-volume samples 15-25 ul)
Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level Mini Samples Heat Shock Protein 47 (HSP47) were tested 20 times on one plate, respectively. Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level Mini Samples Heat Shock Protein 47 (HSP47) were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100 Intra-Assay: CV<10%, Inter-Assay: CV<12%
Assay Procedure Summary	1. Prepare all reagents, samples and standards 2. Add 100ul standard or sample to each well. Incubate 2 hours at 37 degree C 3. Aspirate and add 100ul prepared Detection Reagent A. Incubate 1 hour at 37 degree C 4. Aspirate and wash 3 times 5. Add 100ul prepared Detection Reagent B. Incubate 30 minutes at 37 degree C 6. Aspirate and wash 5 times 7. Add 90ul Substrate Solution. Incubate 10-20 minutes at 37 degree C 8. Add 50ul Stop Solution. Read at 450nm immediately.

Test Principle	The test principle applied in this kit is Sandwich enzyme immunoassay. The microtiter plate provided in this kit has been pre-coated with an antibody specific to Mini Samples Heat Shock Protein 47 (HSP47). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Mini Samples Heat Shock Protein 47 (HSP47). Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain Mini Samples Heat Shock Protein 47 (HSP47), biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm +/- 10nm. The concentration of Mini Samples Heat Shock Protein 47 (HSP47) in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Research Area	Developmental science
Preparation and Storage	Store at 4 degree C for 1 month/-20 degree C for long-term (One year within shelf life) The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.

IMAGES



Standard Curve (Sample)
Typical Standard Curve for HSP47 ELISA (Sandwich)

NCBI AND UNIPROT INFORMATION

NCBI GI #	20141241
NCBI GeneID	871
UniProt Accession #	P50454; P29043; Q5XPB4; Q6NSJ6; Q8IY96; Q9NP88; B3KVJ3
Molecular Weight	418
NCBI Official Full Name	Serpin H1
NCBI Official Synonym Full Names	serpin peptidase inhibitor, clade H (heat shock protein 47), member 1, (collagen binding protein 1)
NCBI Official Symbol	SERPINH1
NCBI Official Synonym Symbols	CBP1; CBP2; OI10; gp46; AsTP3; HSP47; PIG14; PPR0M; RA-A47; SERPINH2
NCBI Protein Information	serpin H1; colligin-1; colligin-2; 47 kDa heat shock protein; arsenic-transactivated protein 3; rheumatoid arthritis antigen A-47; cell proliferation-inducing gene 14 protein; rheumatoid arthritis-related antigen RA-A47; serine (or cysteine) proteinase in
UniProt Protein Name	Serpin H1
UniProt Gene Name	SERPINH1
UniProt Synonym Gene Names	CBP1; CBP2; HSP47; SERPINH2; AsTP3; Colligin
UniProt Entry Name	SERPH_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

