ARG82607
Human Hsp 27 ELISA Kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG82607 Human Hsp 27 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human Hsp 27 in serum, plasma and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	This kit could assay both natural and recombinant Human Hsp 27. No significant cross-reactivity or interference was observed in the following samples: Human: IFN gamma, IL1 beta, IL2, IL4, IL5, IL6, IL8, IL10, IL12, IL17A, IL18, IL21, IL22, IL23, MCP1, TGF beta 1, TNF alpha and VEGF. Mouse: IFN gamma, IL1 beta, IL2, IL4, IL6, IL10, IL17A and TNF alpha. Rat: IFN gamma, IL1 beta, IL4, IL6, IL10 and TNF alpha.
Target Name	Hsp 27
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	15.7 pg/ml
Sample Type	Serum, plasma and cell culture supernatants.
Standard Range	31.3 - 2000 pg/ml
Sample Volume	10 µl
Precision	Intra-Assay CV: 5.1% Inter-Assay CV: 4.0%
Alternate Names	HSP 27; Heat shock 27 kDa protein; HMN2B; HS.76067; SRP27; HEL-S-102; HspB1; CMT2F; 28 kDa heat shock protein; HSP27; Heat shock protein beta-1; Hsp25; Estrogen-regulated 24 kDa protein; Stress-responsive protein 27; HSP28

Application Instructions

Assay Time	~ 2.5 hours

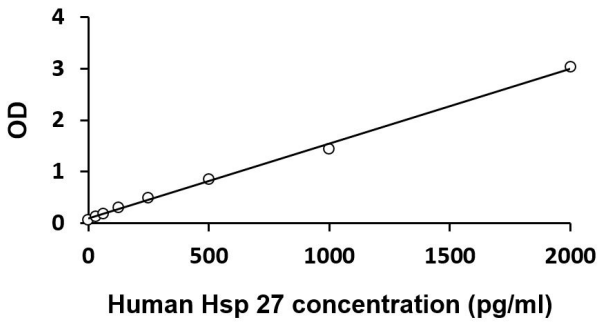
Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	HSPB1
Gene Full Name	heat shock 27kDa protein 1
Background	The protein encoded by this gene is induced by environmental stress and developmental changes. The encoded protein is involved in stress resistance and actin organization and translocates from the cytoplasm to the nucleus upon stress induction. Defects in this gene are a cause of Charcot-Marie-Tooth disease type 2F (CMT2F) and distal hereditary motor neuropathy (dHMN). [provided by RefSeq, Oct 2008]
Function	Involved in stress resistance and actin organization. [UniProt]
Highlight	Related products: Hsp27 antibodies; Hsp27 ELISA Kits; New ELISA data calculation tool: Simplify the ELISA analysis by GainData
PTM	Phosphorylated upon exposure to protein kinase C activators and heat shock (PubMed:8325890). Phosphorylation by MAPKAPK2 and MAPKAPK3 in response to stress dissociates HSPB1 from large small heat-shock protein (sHsps) oligomers and impairs its chaperone activity and ability to protect against oxidative stress effectively. Phosphorylation by MAPKAPK5 in response to PKA stimulation induces F-actin rearrangement (PubMed:1332886, PubMed:8093612, PubMed:19166925). [UniProt]
Cellular Localization	Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, spindle. Note=Cytoplasmic in interphase cells. Colocalizes with mitotic spindles in mitotic cells. Translocates to the nucleus during heat shock and resides in sub-nuclear structures known as SC35 speckles or nuclear splicing speckles. [UniProt]

Images



ARG82607 Human Hsp 27 ELISA Kit standard curve image

ARG82607 Human Hsp 27 ELISA Kit results of a typical standard run with optical density reading at 450 nm.