

ARG10684 anti-Hsp 27 antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Chicken Polyclonal antibody recognizes Hsp 27
Tested Reactivity	Hu, Cow, Hrs, Mk, Pig
Predict Reactivity	Chk
Species Does Not React With	Ms, Rat
Tested Application	ICC/IF, IHC-Fr, WB
Host	Chicken
Clonality	Polyclonal
Isotype	IgY
Target Name	Hsp 27
Immunogen	Recombinant full length purified HSP27 from E. coli.
Conjugation	Un-conjugated
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

Application table	Application	Dilution
	ICC/IF	1:2000
	IHC-Fr	1:2000
	WB	1:5000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

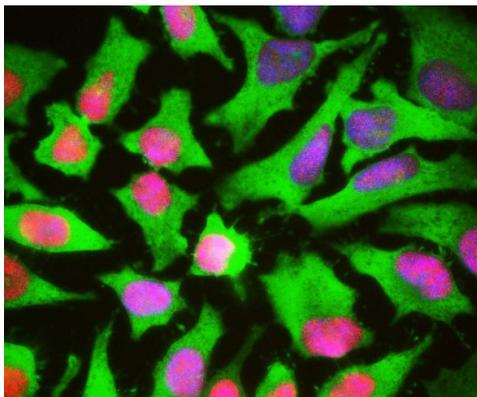
Properties

Form	Liquid
Buffer	PBS and 0.02% Sodium azide.
Preservative	0.02% Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

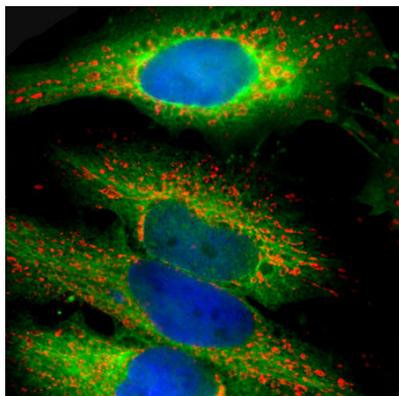
Database links	GeneID: 3315 Human Swiss-port # P04792 Human
Gene Symbol	HSPB1
Gene Full Name	heat shock 27kDa protein 1
Background	The protein encoded by this gene is induced by environmental stress and developmental changes. The encoded protein is involved in stress resistance and actin organization 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]
Calculated Mw	23 kDa
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).

Images



ARG10684 anti-Hsp 27 antibody ICC/IF image

Immunocytochemistry: HeLa cells stained with ARG10684 anti-Hsp 27 antibody (green), and co-stained with a monoclonal antibody to High mobility Group B protein 1 (HMGB1, red) and DNA (blue). ARG10684 reveals strong cytoplasmic staining and penetrates into the actin rich ruffled margins, while the HMGB1 antibody reveals strong nuclear staining which overlaps with the DNA staining.



ARG10684 anti-Hsp 27 antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG10684 anti-Hsp 27 antibody (green) at 1:1000 dilution and costained with Mouse mAb to Hsp 60 (red) at 1:5000 dilution. DAPI (blue) for nuclear staining.

The Hsp 27 antibody produces strong cytoplasmic staining, while the Hsp 60 antibody specifically labels mitochondria.

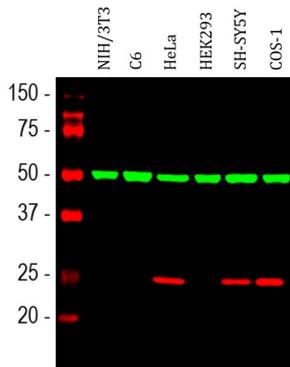
ARG10684 anti-Hsp 27 antibody WB image

Western blot: HeLa cell crude extracts stained with ARG10684 anti-Hsp 27 antibody.



ARG10684 anti-Hsp 27 antibody WB image

Western blot: NIH/3T3, C6, HeLa, HEK293, SH-SY5Y and COS-1 cell lysates stained with ARG10684 anti-Hsp 27 antibody (red) at 1:2000 dilution. The blot was simultaneously stained with Mouse mAb to beta tubulin (green) at 1:10000 dilution.



Note that the antibody does not recognize rodent Hsp 27.