

# Hsp27 Antibody

Purified Mouse Monoclonal Antibody (Mab) Catalog # AP52776

## **Product Information**

Application	WB, ICC
Primary Accession	<u>P04792</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	22783

# **Additional Information**

Gene ID	3315
Other Names	Heat shock 27kDa protein;28 kDa heat shock protein;CMT2F;DKFZp586P1322;Estrogen regulated 24 kDa protein;Estrogen-regulated 24 kDa protein;Heat shock 25kDa protein 1;Heat shock 27 kDa protein;Heat shock 27kD protein 1;Heat shock 27kDa protein 1;Heat shock 28kDa protein 1;Heat Shock Protein 27;Heat Shock Protein 27;Heat shock protein beta 1;Heat shock protein beta-1;HMN2B;HS.76067;Hsp 25;HSP 27;Hsp 28;Hsp B1;Hsp25;HSP27; Hsp28;HspB1;HSPB1_HUMAN;SRP27;Stress responsive protein 27;Stress-responsive protein 27.
Dilution	WB~~1:1000 ICC~~1:300
Format	Purified mouse monoclonal in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide, 50% glycerol, 0.1%BSA
Storage	Store at -20 °C.Stable for 12 months from date of receipt

## **Protein Information**

Name	HSPB1
Synonyms	HSP27, HSP28
Function	Small heat shock protein which functions as a molecular chaperone probably maintaining denatured proteins in a folding- competent state (PubMed: <u>10383393</u> , PubMed: <u>20178975</u> ). Plays a role in stress resistance and actin organization (PubMed: <u>19166925</u> ). Through its molecular chaperone activity may regulate numerous biological processes including the phosphorylation and the axonal transport of neurofilament proteins (PubMed: <u>23728742</u> ).

Cellular Location	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.
Tissue Location	Detected in all tissues tested: skeletal muscle, heart, aorta, large intestine, small intestine, stomach, esophagus, bladder, adrenal gland, thyroid, pancreas, testis, adipose tissue, kidney, liver, spleen, cerebral cortex, blood serum and cerebrospinal fluid. Highest levels are found in the heart and in tissues composed of striated and smooth muscle.

#### Background

Involved in stress resistance and actin organization.

#### References

Hickey E.,et al.Nucleic Acids Res. 14:4127-4145(1986). Carper S.W.,et al.Nucleic Acids Res. 18:6457-6457(1990). Hino M.,et al.Biochem. Biophys. Res. Commun. 271:164-169(2000). Briolay J.,et al.Submitted (JUN-1993) to the EMBL/GenBank/DDBJ databases. Yu W.,et al.Genome Res. 7:353-358(1997).

#### Images



Western blot detection of Hsp27 in Hela,HsHela,A431,COS7,Lncap and MCF7 cell lysates and using Hsp27 mouse mAb (1:1000 diluted).Predicted band size: 23KDa.Observed band size:27KDa.



Immunocytochemistry stain of Hela using Hsp27 mouse mAb (1:300).

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