

HSPB1 / HSP27 Antibody (clone 5D12-A12)
Mouse Monoclonal Antibody
Catalog # ALS14978**Specification**

HSPB1 / HSP27 Antibody (clone 5D12-A12) - Product Information

Application	WB, IHC
Primary Accession	P04792
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	23kDa KDa

HSPB1 / HSP27 Antibody (clone 5D12-A12) - Additional Information**Gene ID** 3315**Other Names**

Heat shock protein beta-1, HspB1, 28 kDa heat shock protein, Estrogen-regulated 24 kDa protein, Heat shock 27 kDa protein, HSP 27, Stress-responsive protein 27, SRP27, HSPB1, HSP27, HSP28

Target/Specificity

Detects a 27kD protein corresponding to the molecular mass of hsp27 on SDS PAGE immunoblots. There is no cross-reactivity to alphaBcrystallin.

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

HSPB1 / HSP27 Antibody (clone 5D12-A12) is for research use only and not for use in diagnostic or therapeutic procedures.

HSPB1 / HSP27 Antibody (clone 5D12-A12) - 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:10383393, PubMed:20178975). Plays a role in stress resistance and actin organization (PubMed:19166925). Through its molecular chaperone activity may regulate numerous biological processes including the phosphorylation and the axonal transport of neurofilament proteins (PubMed:23728742).

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.

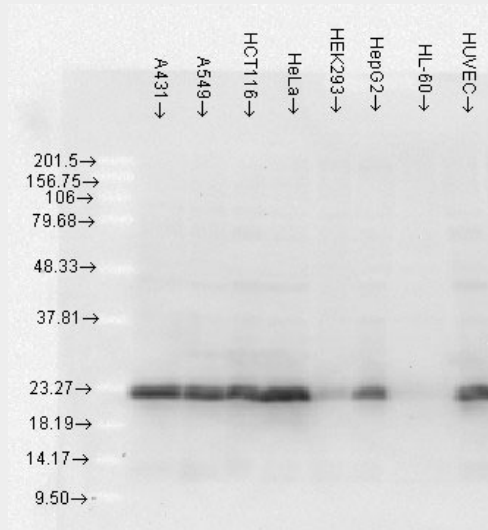
Tissue Location

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.

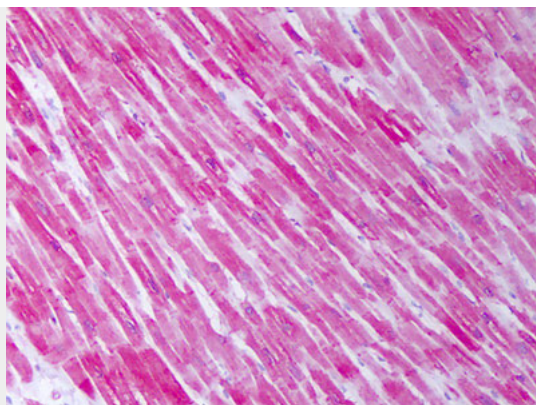
HSPB1 / HSP27 Antibody (clone 5D12-A12) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

HSPB1 / HSP27 Antibody (clone 5D12-A12) - Images

Hsp27(5D12-A3), HeLa lines.



Anti-HSPB1 antibody IHC of human heart.

HSPB1 / HSP27 Antibody (clone 5D12-A12) - Background

Involved in stress resistance and actin organization.

HSPB1 / HSP27 Antibody (clone 5D12-A12) - 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).