

Anti-Hsp27 Picoband Antibody

Catalog # ABO11928

Product Information

Application	WB, IHC-P, IHC-F
Primary Accession	P04792
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Heat shock protein beta-1(HSPB1) detection. Tested with WB, IHC-P, IHC-F in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	22783
Application Details	Immunohistochemistry(Frozen Section), 0.5-1 μ g/ml, Human, - Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, By Heat Western blot, 0.1-0.5 μ g/ml, Human
Subcellular Localization	Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, spindle. 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 Specificity	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. .
Source	Eukaryota
Protein Name	Heat shock protein beta-1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .

Immunogen	E.coli-derived human Hsp27 recombinant protein (Position: M1-K205). Human Hsp27 shares 83% amino acid (aa) sequence identity with mouse Hsp27.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20° C for one year. After reconstitution, at 4° C for one month. It can also be aliquotted and stored frozen at -20° C for a longer time. Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the small heat shock protein (HSP20) family.

Protein Information

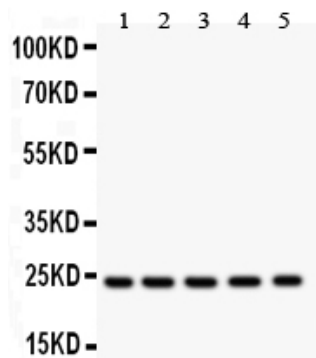
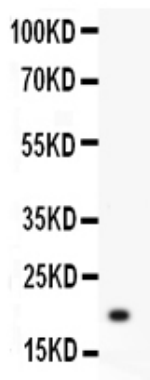
Name	HSPB1
Synonyms	HSP27, HSP28
Function	Small heat shock protein which functions as a molecular chaperone probably maintaining denatured proteins in a folding- competent state (PubMed: 10383393 , PubMed: 20178975). Plays a role in stress resistance and actin organization (PubMed: 19166925). Through 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.

Background

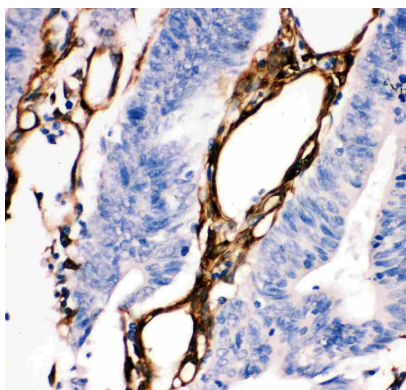
HSPB1(Heat shock 27kDa protein 1), also known as HSP27, is a protein that in humans is encoded by the HSPB1 gene. HSP27 gene is mapped to 7q11.23. The protein encoded by this gene is induced by environmental stress and developmental changes. The encoded protein is involved in stress resistance and actin 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).

Images

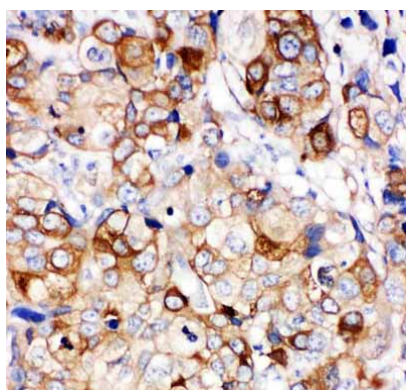
Anti- HSP27 antibody, ABO11928, Western blotting
lanes: Anti HSP27 (ABO11928) at 0.5ug/mlWB:
Recombinant Human HSP27 Protein 0.5ngPredicted bind
size: 19KDObserved bind size: 19KD



Anti- HSP27 antibody, ABO11928, Western blotting
 All lanes: Anti HSP27 (ABO11928) at 0.5ug/ml
 Lane 1: NRK Whole Cell Lysate at 40ug
 Lane 2: HELA Whole Cell Lysate at 40ug
 Lane 3: A549 Whole Cell Lysate at 40ug
 Lane 4: COLO320 Whole Cell Lysate at 40ug
 Lane 5: HEPG2 Whole Cell Lysate at 40ug
 Predicted bind size: 23KD
 Observed bind size: 23KD

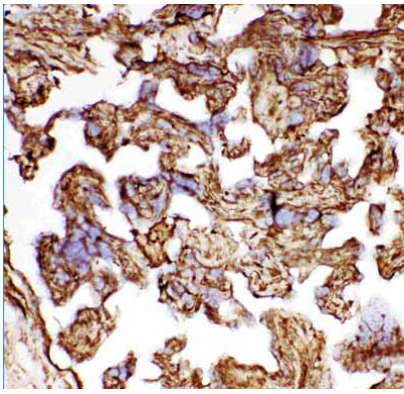


Anti- HSP27 antibody, ABO11928, IHC(P)
 IHC(P): Human Intestinal Cancer Tissue



Anti- HSP27 antibody, ABO11928, IHC(P)
 IHC(P): Human Mammary Cancer Tissue

Anti- HSP27 antibody, ABO11928, IHC(F)
 IHC(F): Human Placenta Tissue



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