

HSP27 Monoclonal Antibody

Catalog No :	YM0339
Reactivity :	Human;Rat
Applications :	WB;IHC;IF;FCM;ELISA
Target :	HSP27
Fields :	>>MAPK signaling pathway;>>VEGF signaling pathway;>>Amoebiasis
Gene Name :	HSPB1
Protein Name :	Heat shock protein beta-1
Human Gene Id :	3315
Human Swiss Prot No :	P04792
Mouse Swiss Prot No :	P14602
Rat Gene Id :	24471
Rat Swiss Prot No :	P42930
Immunogen :	Purified recombinant fragment of human HSP27 expressed in E. Coli.
Specificity :	HSP27 Monoclonal Antibody detects endogenous levels of HSP27 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. Flow cytometry: 1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 23kD

Cell Pathway : MAPK_ERK_Growth;MAPK_G_Protein;VEGF;

P References : 1. Clin Cancer Res. 2008 Dec 15;14(24):8279-87.
2. Cell Signal. 2009 Jan;21(1):143-50.

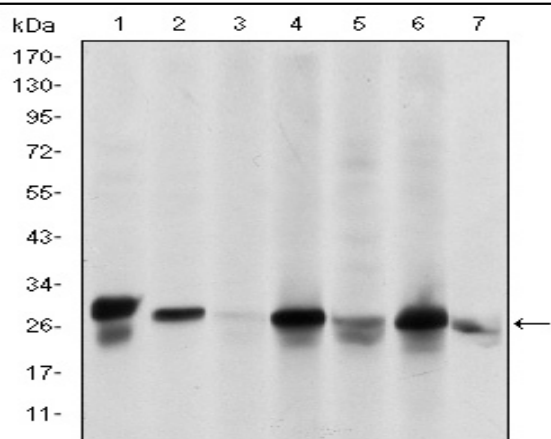
Background : The protein encoded by this gene is induced by environmental stress and developmental changes. The encoded protein is involved in stress resistance and actin organization and translocates from the cytoplasm to the nucleus upon stress induction. Defects in this gene are a cause of Charcot-Marie-Tooth disease type 2F (CMT2F) and distal hereditary motor neuropathy (dHMN). [provided by RefSeq, Oct 2008],

Function : disease:Defects in HSPB1 are a cause of distal hereditary motor neuronopathy type 2B (HMN2B) [MIM:608634]. Distal hereditary motor neuronopathies constitute a heterogeneous group of neuromuscular disorders caused by selective impairment of motor neurons in the anterior horn of the spinal cord, without sensory deficit in the posterior horn. The overall clinical picture consists of a classical distal muscular atrophy syndrome in the legs without clinical sensory loss. The disease starts with weakness and wasting of distal muscles of the anterior tibial and peroneal compartments of the legs. Later on, weakness and atrophy may expand to the proximal muscles of the lower limbs and/or to the distal upper limbs.,disease:Defects in HSPB1 are the cause of Charcot-Marie-Tooth disease type 2F (CMT2F) [MIM:606595]. CMT2F is a form of Charcot-Marie-Tooth disease, the most common inherited disorder of

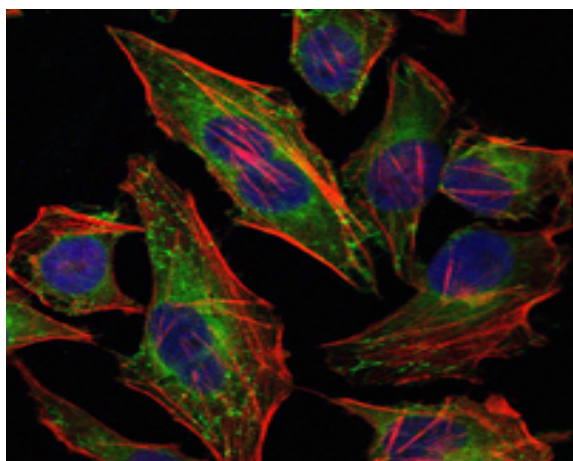
Subcellular Location : Cytoplasm . Nucleus . Cytoplasm, cytoskeleton, spindle . Cytoplasmic in interphase cells. Colocalizes with mitotic spindles in mitotic cells. Translocates to the nucleus during heat shock and resides in sub-nuclear structures known as SC35 speckles or nuclear splicing speckles. .

Expression : 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.

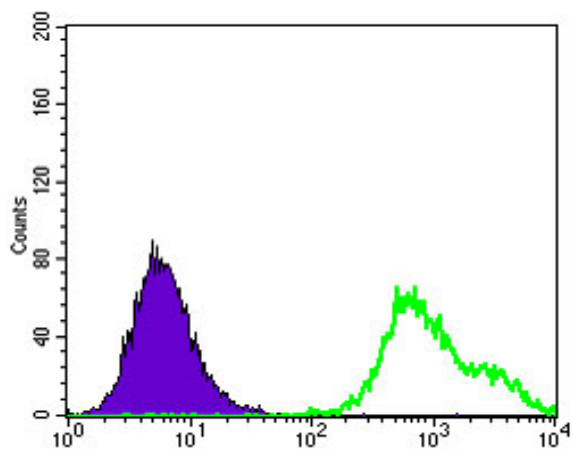
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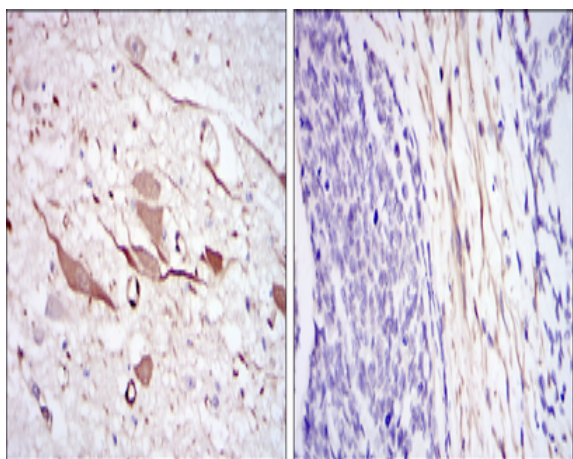
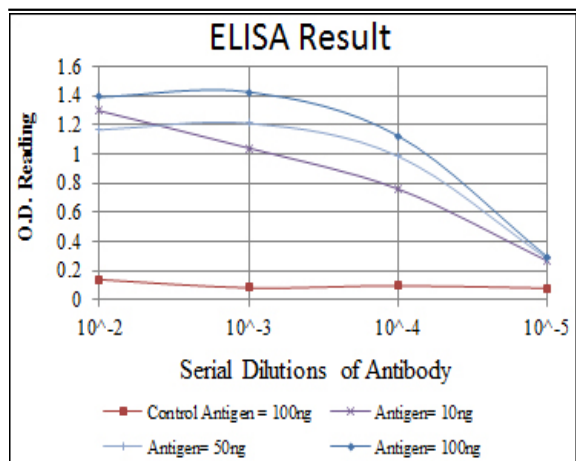
Western Blot analysis using HSP27 Monoclonal Antibody against HeLa (1), A549 (2), Jurkat (3), A431 (4), HEK293(5), HepG2 (6) and PC-12 (7) cell lysate.



Immunofluorescence analysis of HeLa cells using HSP27 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of HepG2 cells using HSP27 Monoclonal Antibody (green) and negative control (purple).



Immunohistochemistry analysis of paraffin-embedded brain tissues (left) and esophageal cancer tissues (right) with DAB staining using HSP27 Monoclonal Antibody