

## **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

P04792

P14602

Human Gene ld: 3315

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

Rat Gene ld: 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

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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

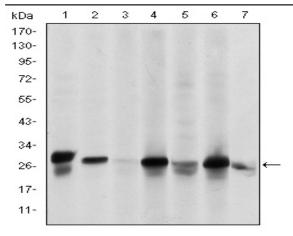
intestine, stomach, esophagus, bladder, adrenal gland, thyroid, pancreas, testis,

adipose tissue, kidney, liver, spleen, cerebral cortex, blood serum and

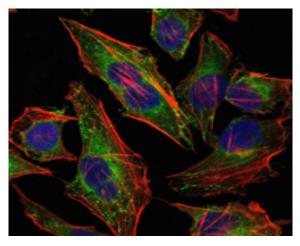
cerebrospinal fluid. Highest levels are found in the heart and in tissues composed

of striated and smooth muscle.

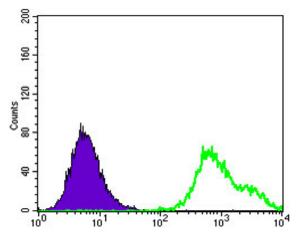
## **Products Images**



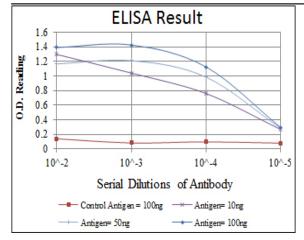
Western Blot analysis using HSP27 Monoclonal Antibody against HeLa (1), A549 (2), Jurkat (3), A431 (4), HEK293(5), HepG2 (6) and PC-12 (7) cell lysate.

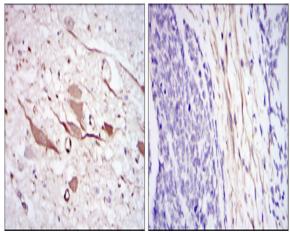


Immunofluorescence analysis of Hela cells using HSP27 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



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

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