Anti-Hsp27 Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

Catalog # M013137

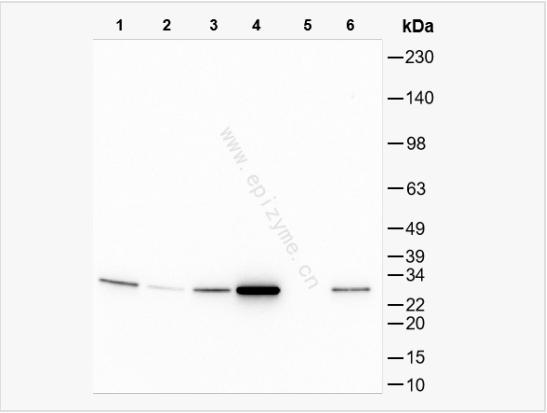
Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Human
Dilution	WB 1:1,000~1:2,000; IF 1:100~1:200
Host	Mouse
Clonality	Monoclonal
Clone No.	95K02K34
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human Hsp27
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Hsp27 Mouse mAb [95K02K34] is for research use only and not for use in diagnostic or therapeutic procedures.

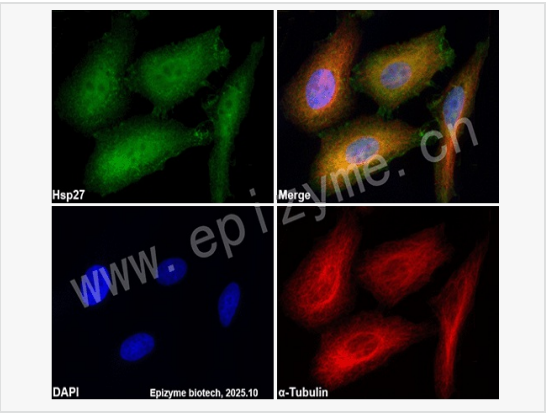
Protein Information

Synonyms	CMT2F; HEL-S-102; HMN2B; HMND3; HS.76067; HSP27; HSP28; Hsp25; SRP27; 27kDa; HSPB1_CANLF; HSPB1; Heat shock 27 kDa protein (HSP 27); HSPB1_HUMAN; 28 kDa heat shock protein; Estrogen-regulated 24 kDa protein; Heat shock protein family B member 1; Stress-responsive protein 27 (SRP27); HSPB1_MOUSE; Growth-related 25 kDa protein; Heat shock 25 kDa protein (HSP 25); p25; HSPB1_RAT.
Calculated MW	Calculated MW: 23 kDa; Observed MW: 27 kDa
Uniprot ID	P04792
Gene ID	3315
Background	This gene encodes a member of the small heat shock protein (HSP20) family of proteins. In response to environmental stress, the encoded protein translocates from the cytoplasm to the nucleus and functions as a molecular chaperone that promotes the correct folding of other proteins. This protein plays an important role in the differentiation of a wide variety of cell types. Expression of this gene is correlated with poor clinical outcome in multiple human cancers, and the encoded protein may promote cancer cell proliferation and metastasis, while protecting cancer cells from apoptosis. Mutations in this gene have been identified in human patients with Charcot-Marie-Tooth disease and distal hereditary motor neuropathy. [provided by RefSeq, Aug 2017]
Cellular 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.

Validation Images



Western Blot - Anti-Hsp27 Mouse mAb [95K02K34]
All lanes: M013137 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lane 4: MCF-7 (human breast adenocarcinoma epithelial cell) whole cell lysates
Lane 5: 293T (Human embryonic kidney cell) whole cell lysates
Lane 6: U87 (Human malignant glioblastoma epithelial cells) whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Mouse IgG(H+L), HRP Conjugated (Cat. No. LF101) at 1:5,000 dilution
Predicted band size: 23 kDa
Observed band size: 27 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-Hsp27 Mouse mAb [95K02K34]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibody: M013137 at 1:100 dilution and and α-tubulin Rabbit Monoclonal Antibody (Cat. No. LF213) at 1:100 dilution
Secondary antibody: Goat anti-Mouse (488) at 1:1,000 dilution (shown in green) and Goat anti-Rabbit (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).