

## Anti-Hsp27 Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

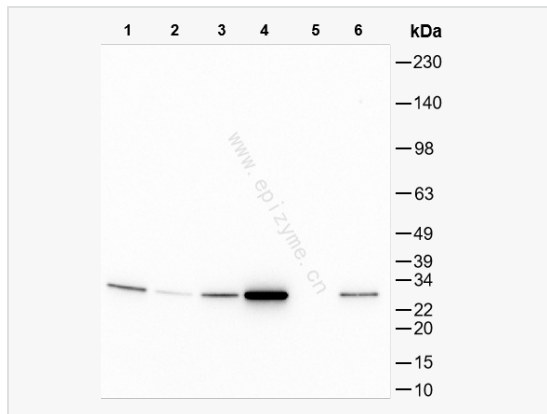
Catalog # M013137

### 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |



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

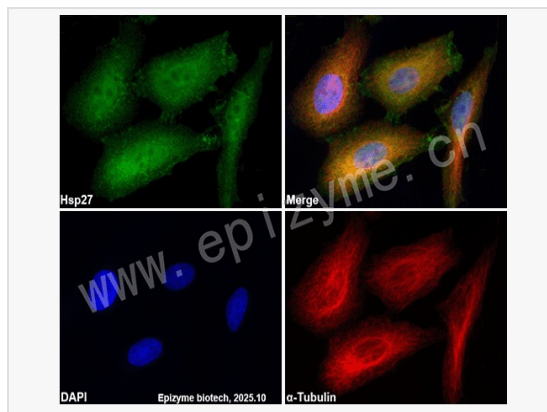
Lysates/proteins at 10 µg per lane.

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  $\alpha$ -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).