

Datasheet for ABIN6939661

**anti-HSP27 antibody****6** Images[Go to Product page](#)

## Overview

Quantity:	100 µg
Target:	HSP27 (HSPB1)
Reactivity:	Human, Rat, Mouse, Sheep, Chicken, Monkey, Chimpanzee
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This HSP27 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Flow Cytometry (FACS), Immunostaining (Ist), Staining Methods (StM)

## Product Details

Immunogen:	Partially Purified hsp27 (earlier called 24K) protein from breast cancer MCF-7 cells.
Clone:	G3-1
Isotype:	IgG1 kappa
Specificity:	MAb G3.1 reacts specifically with heat shock protein HSP27 in human and monkey tissues and cell lines such as MCF-7. HSP27, also referred to as the Estrogen-Regulated 24K protein and HSP28, is one of several small heat shock proteins produced by all organisms studied. HSP27 synthesis is induced by elevated temperature, as well as by estrogen in hormone responsive cells. Interestingly, human HSP27 also shares greater than 50 % homology with low molecular weight Drosophila HSPs and mammalian alpha-crystalline lens protein. Because of the estrogen responsive nature of HSP27, this protein has been studied extensively in human estrogen responsive tissues such as cervix, endometrium and breast tissue. Therefore HSP27 may be useful in classifying various hormone sensitive tumors.

## Product Details

Purification: Purified by Protein A/G

## Target Details

Target: HSP27 (HSPB1)

Alternative Name: HSPB1 ([HSPB1 Products](#))

Molecular Weight: 27kDa

Gene ID: 3315

UniProt: [P04792](#)

Pathways: [MAPK Signaling](#), [Regulation of Actin Filament Polymerization](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#), [Negative Regulation of intrinsic apoptotic Signaling](#), [VEGF Signaling](#)

## Application Details

Application Notes: Positive Control: MCF-7 cells. ~50 % of Breast Carcinomas are positive for hsp27 especially those that are also positive for ER and/or PgR. HeLa cells.  
Known Application: Flow Cytometry (0.5-1 µg/million cells), Immunofluorescence (0.5-1 µg/mL), Western Blot (0.25-0.5 µg/mL), Immunohistochemistry (Formalin-fixed) (0.5-1 µg/mL for 30 minutes at RT)(Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes)Optimal dilution for a specific application should be determined.

Restrictions: For Research Use only

## Handling

Concentration: 200 µg/mL

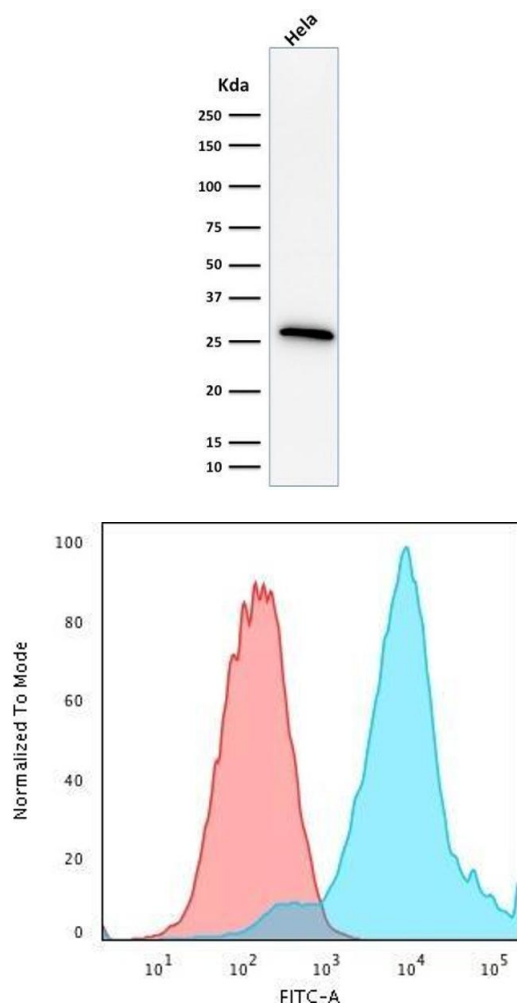
Buffer: 10 mM PBS with 0.05 % BSA & 0.05 % azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -80 °C

Storage Comment: Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.



### Western Blotting

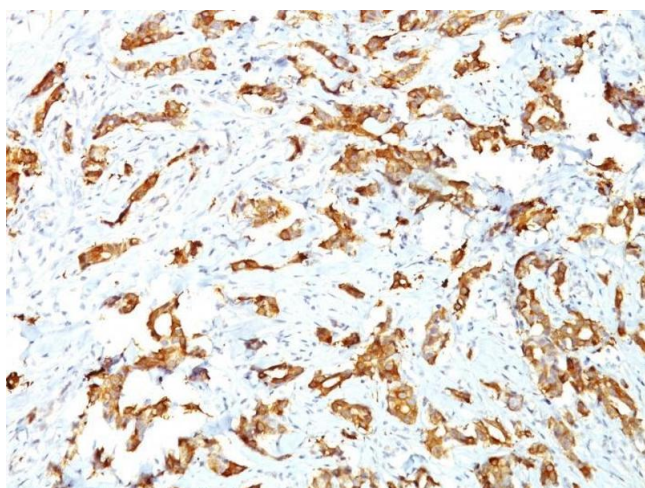
**Image 1.** Western Blot Analysis of HeLa cell lysate using HSP27 Monoclonal Antibody (G3.1).

### Flow Cytometry

**Image 2.** Flow Cytometric Analysis of PFA-fixed MCF-7 cells using HSP27 MAb (G3.1) followed by Goat anti- Mouse- IgG- CF488 (Blue); Isotype Control (Red).

### Immunohistochemistry

**Image 3.** Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with HSP27 Monoclonal Antibody (G3.1).



Please check the [product details page](#) for more images. Overall 6 images are available for ABIN6939661.