

Mouse anti-Human Hsp27 Monoclonal Antibody | anti-Hsp27 antibody

Hsp27 antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA47996	Mouse	Human	Immunofluorescence, Immunocytochemistry, Flow Cytometry, Functional Assay, Western Blot, ELISA

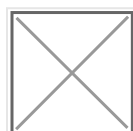
PRODUCT SYNONYMS

Hsp27; Monoclonal Antibody; Hsp27 antibody; Heat shock 27 kDa protein; Hspb1; Hsp25; HspB1; HSP 27; Growth-related 25 kDa protein; P25; HSP25; Heat shock protein beta-1; Heat shock 27 kDa protein 28 kDa heat shock protein; CMT2F; DKFZp586P1322; Estrogen regulated 24 kDa protein; at shock 25kDa protein 1; Heat shock 27kDa protein 1; Heat shock 28kDa protein 1; Heat Shock Protein 27; Heat shock protein beta 1; Heat Shock Protein27; HS.76067; Hsp 28; Hsp B1; Hsp28; SRP27; Stress responsive protein 27.; anti-Hsp27 antibody

PRODUCT SPECIFICATIONS

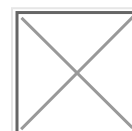
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1, k
Clone Number	2A5
Purity/Purification	By protein-G affinity chromatography
Form/Format	Liquid. In phosphate-buffered saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	205
Applicable Applications for anti-Hsp27 antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), FCM/FACS (Flow Cytometry), WB (Western Blot), ELISA
Antigen Species	Human
Immunogen	Recombinant human Hsp27 (1-205aa) purified from E. coli
Clone Note	Anti-human Hsp27 mAb, clone 2A5, is derived from hybridization of mouse SP2/0 myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human Hsp27 protein.
Preparation and Storage	Can be stored at 4 degree C. For long term storage, aliquot and store at -20 degree C. Avoid repeated freezing and thawing cycles.

IMAGES



IF (Immunofluorescence)

ICC/IF analysis of Hsp27 in HeLa cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human Hsp27 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



IHC (Immunohistochemistry)

Paraffin embedded sections of human colon cancer tissue were incubated with anti-human Hsp27 (1:50) for 2 hours at room temperature. Antigen retrieval was performed in 0.1M sodium citrate buffer and detected using Diaminobenzidine (DAB)



WB (Western Blot)

The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human Hsp27 (1:1,000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1.: HeLa cell lysate Lane 2.: K562 cell lysate Lane 3.: MCF7 cell lysate The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human Hsp27 (1:1,000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1.: A431 cell lysate Lane 2.: HepG2 cell lysate

ADDITIONAL INFORMATION

Related Product Information for anti-Hsp27 antibody	Hsp27 (also known as the Estrogen-Regulated 24k protein, and hsp 28) is a member of the mammalian small heat shock protein family. Hsp27 is expressed constitutively in many tissues and its expression is increased to high levels after various types of stress including elevated temperatures, toxic metals, drugs and oxidants. Also, Hsp27 is phosphorylated in vivo on three phosphorylation sites (Ser15, Ser78 and Ser82) by protein kinases including MAPKAP kinase 2 and the stress-activated protein kinase SAPk2 (p38). Hsp27 forms a multimeric complex within cells, and its primary chaperone function, like other small Hsps, appears to be the stabilization of denatured or aggregated proteins in a refolding competent state.
Product Categories/Family for anti-Hsp27 antibody	Heat Shock Proteins
References	Ehrnsperger M, et al., (1997) EMBO J 16:221-229; Steve J, et al., (2000) Mol Cell Biol 20 (20):7602-7612; Butt E, et al., (2001) J Biol Chem 276:7108-7113; Michael, et al., (2002) Cell Stress Chaperones 7 (3):281-296

NCBI AND UNIPROT INFORMATION

NCBI GI #	4504517
NCBI GeneID	3315
NCBI Accession #	NP_001531
NCBI GenBank Nucleotide #	NM_001540.4
UniProt Accession #	P04792; Q6FI47; Q96C20; Q96EI7; Q9UC31; Q9UC34; Q9UC35; Q9UC36; B2R4N8
Molecular Weight	22,783 Da
NCBI Official Full Name	heat shock protein beta-1
NCBI Official Synonym Full Names	heat shock protein family B (small) member 1
NCBI Official Symbol	HSPB1
NCBI Official Synonym Symbols	CMT2F; HMN2B; HSP27; HSP28; Hsp25; SRP27; HS.76067; HEL-S-102
NCBI Protein Information	heat shock protein beta-1
UniProt Protein Name	Heat shock protein beta-1
UniProt Gene Name	HSPB1
UniProt Synonym Gene Names	HSP27; HSP28; HspB1; HSP 27; SRP27

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.