

Anti-Human Hsp27 DyLight® 488 conjugated HSPB1 Antibody(monoclonal, 3H3)

Catalog # ABO14928

Product Information

Application	FC
Primary Accession	P04792
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-Human Hsp27 DyLight® 488 conjugated HSPB1 Antibody (monoclonal, 3H3) . Tested in Flow Cytometry applications. This antibody reacts with Human.

Additional Information

Gene ID	3315
Other Names	Heat shock protein beta-1, HspB1, 28 kDa heat shock protein, Estrogen-regulated 24 kDa protein, Heat shock 27 kDa protein, HSP 27, Heat shock protein family B member 1, Stress-responsive protein 27, SRP27, HSPB1, HSP27, HSP28
Calculated MW	22783
Application Details	Flow Cytometry, 1-3 μ g/1x10 ⁶ cells, human
Source	Eukaryota
Contents	Each vial contains 50% glycerol, 0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.02% NaN ₃ .
Clone Names	Clone: 3H3
Immunogen	E.coli-derived human Hsp27 recombinant protein (Position: M1-K205). Human Hsp27 shares 83% amino acid (aa) sequence identity with mouse Hsp27.
Cross Reactivity	No cross-reactivity with other proteins.
Storage	At -20°C for one year from date of receipt. Avoid repeated freezing and thawing. Protect from light.

Protein Information

Name	HSPB1
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Synonyms	HSP27, HSP28
Function	Small heat shock protein which functions as a molecular chaperone probably maintaining denatured proteins in a folding- competent state (PubMed: 10383393 , PubMed: 20178975). Plays a role in stress resistance and actin organization (PubMed: 19166925). Through its molecular chaperone activity may regulate numerous biological processes including the phosphorylation and the axonal transport of neurofilament proteins (PubMed: 23728742).
Cellular Location	Cytoplasm. Nucleus Cytoplasm, cytoskeleton, spindle Note=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.
Tissue Location	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.

Background

HSPB1 (Heat shock 27kDa protein 1), also known as HSP27, is a protein that in humans is encoded by the HSPB1 gene. HSP27 gene is mapped to 7q11.23. 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).

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