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Rabbit Anti-Phospho-HSP27 (Ser82) antibody

SL3180R

Product Name:	Phospho-HSP27 (Ser82)
Chinese Name:	磷酸化热休克蛋白27抗体
Alias:	Hsp27 (phospho S82); p-Hsp27 (phospho S82); HSP27(Phospho-Ser82);Heat shock 27kDa protein; 28 kDa heat shock protein; CMT2F; DKFZp586P1322; Estrogen regulated 24 kDa protein; Estrogen-regulated 24 kDa protein; Heat shock 25kDa protein 1; Heat shock 25kDa protein 1; Heat shock 27 kDa protein; Heat shock 27kD protein 1; Heat shock 27kDa protein 1; Heat shock 27kDa protein 1; Heat shock 28kDa protein 1; Heat shock 28kDa protein 1; Heat Shock Protein 27; Heat Shock Protein 27; Heat shock protein beta 1; Heat shock protein beta-1; Heat Shock Protein27; Heat Shock Protein27; HMN2B; HS.76067; Hsp 25; Hsp 25; Hsp 27; Hsp 27; Hsp 28; Hsp 28; Hsp B1; Hsp B1; Hsp25; Hsp25; HSP27; Hsp28; Hsp28; HspB1; HspB1; HSPB1_HUMAN; SRP27; Stress responsive protein 27; Stress-responsive protein 27.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000Flow-Cyt=1μg/Test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	27kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human HSP27 around the phosphorylation site of Ser82:QL(p-S)SG
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year

	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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). [provided by RefSeq, Oct 2008] **Function:** Involved in stress resistance and actin organization. **Subunit:** Interacts with TGFB1I1. Associates with alpha- and beta-tubulin, microtubules and CRYAB. Interacts with HSPB8 and HSPBAP1. **Subcellular 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 Specificity:** 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. **Post-translational modifications:** Phosphorylated in MCF-7 cells on exposure to protein kinase C activators and heat shock. Phosphorylation by MAPKAPK2 and MAPKAPK3 in response to stress leads to dissociate HSP27/HSPB1 from large small heat-shock protein (sHsps) oligomers and impair its chaperone activity and ability to protect against oxidative stress effectively. Phosphorylation by MAPKAPK5 in response to PKA stimulation induces F-actin rearrangement. **DISEASE:** Defects in HSPB1 are the cause of Charcot-Marie-Tooth disease type 2F (CMT2F) [MIM:606595]. CMT2F is a form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot-Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathy or CMT1, and primary peripheral axonal neuropathy or CMT2. Neuropathies of the CMT2 group are characterized by signs of axonal regeneration in the absence of obvious myelin

alterations, normal or slightly reduced nerve conduction velocities, and progressive distal muscle weakness and atrophy. Nerve conduction velocities are normal or slightly reduced. CMT2F onset is between 15 and 25 years with muscle weakness and atrophy usually beginning in feet and legs (peroneal distribution). Upper limb involvement occurs later. CMT2F inheritance is autosomal dominant.
Defects in HSPB1 are a cause of distal hereditary motor neuronopathy type 2B (HMN2B) [MIM:608634]. Distal hereditary motor neuronopathies constitute a heterogeneous group of neuromuscular disorders caused by selective impairment of motor neurons in the anterior horn of the spinal cord, without sensory deficit in the posterior horn. The overall clinical picture consists of a classical distal muscular atrophy syndrome in the legs without clinical sensory loss. The disease starts with weakness and wasting of distal muscles of the anterior tibial and peroneal compartments of the legs. Later on, weakness and atrophy may expand to the proximal muscles of the lower limbs and/or to the distal upper limbs.

Similarity:
Belongs to the small heat shock protein (HSP20) family.

SWISS:
P04792

Gene ID:
3315

Database links:

Entrez Gene: 403979Dog

Entrez Gene: 3315Human

Entrez Gene: 15507Mouse

Entrez Gene: 24471Rat

Omim: 602195Human

SwissProt: P42929Dog

SwissProt: P04792Human

SwissProt: P14602Mouse

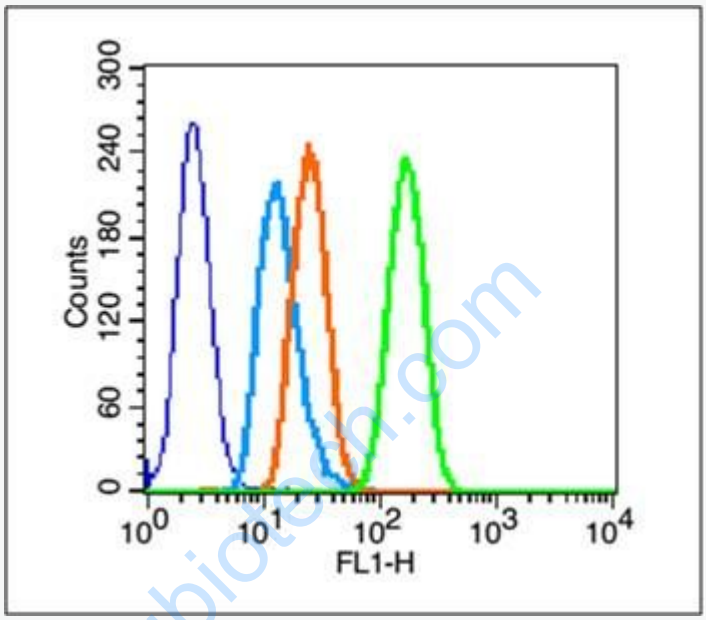
SwissProt: P42930Rat

Unigene: 3849Dog

Unigene: 520973Human

Unigene: 13849Mouse

Unigene: 3841Rat

	Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	 Blank control (blue line): A431 cells (blue). Primary Antibody (green line): Rabbit Anti-pho-HSP27 (Ser82) antibody (SL3180R) Dilution: 1µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC Dilution: 1µg /test. Protocol The cells were fixed with 70% methanol (Overnight at 4℃) and then permeabilized with 90% ice-cold methanol for 20 min at -20℃. Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X

	PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.