

Polyclonal Anti-HSPB2 Antibody

Catalog Number: PA1802

Description

Gene Name	heat shock 27kDa protein 2(HspB2)
Recommended Protein Name	Heat shock protein beta-2
Lot No.	0181312c010284
Size	100µg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	Reacts with: human, rat Predicted to work with: mouse
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human HSPB2(102-118aa RHPQRLDRHGFVSREFC), identical to the related rat and mouse sequences.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .

Application

	Concentration	Tested Species	Predicted Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Hu, Rat	Ms	-
Immunohistochemistry (Frozen Section)	0.5-1µg/ml	Rat	Hu, Ms	-
Immunocytochemistry	0.5-1µg/ml	Hu	Ms, Rat	-

Tested Species: In-house tested species with positive results.

Predicted Species: Species predicted to be fit for the product based on sequence similarities.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage: At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB, supported by SA1022 in IHC(F) and ICC.

Background

Alpha-B-crystallin is a member of the alpha-crystallin/small heat-shock protein (HSP) family and under various neuropathologic conditions accumulates in reactive astrocytes and degenerating neurons. In the 5-prime flanking region of the CRYAB gene on 11q22-q23, where a constitutive DNaseI hypersensitive site is located, Iwaki et al. (1997) identified a gene transcribed in the opposite direction. Analysis of its mRNA structure by RT-PCR and 5-prime/3-prime RACE revealed that this gene is composed of 2 exons and encodes a new member of the alpha-crystallin/hsp family. They termed the gene HSPB2. Iwaki et al. (1997) also determined the complete genomic structure of the rat homolog of HSPB2. Southern blot analysis demonstrated that HSPB2 is expressed preferentially in skeletal muscle and heart but not in the lens, while the neighboring CRYAB gene is highly expressed in all 3 tissues. The 2 related genes are arranged in a head-to-head manner with an intergenic sequence of less than 1 kb, raising a possibility of shared regulatory elements for their expression.

Reference

1. Iwaki, A., Nagano, T., Nakagawa, M., Iwaki, T., Fukumaki, Y. Identification and characterization of the gene encoding a new member of the alpha-crystallin/Small hsp family, closely linked to the alpha-B-crystallin gene in a head-to-head manner. *Genomics* 45: 386-394, 1997.