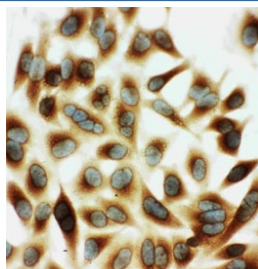


HSPB2 Antibody (R30900)

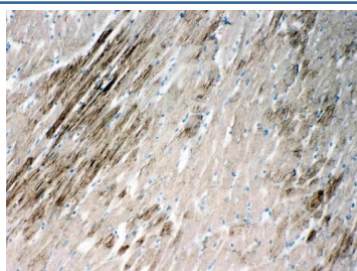
Catalog No.	Formulation	Size
R30900	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

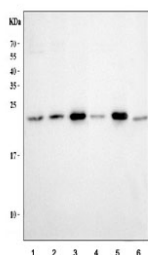
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	Q16082
Localization	Cytoplasmic
Applications	Western Blot : 0.5-1ug/ml IHC (Frozen) : 0.5-1ug/ml Immunocytochemistry : 0.5-1ug/ml
Limitations	This HSPB2 antibody is available for research use only.



ICC staining of human HeLa cells with HSPB2 antibody.



IHC-F testing of HSPB2 antibody and rat heart tissue.



Western blot testing of 1) human U-2 OS, 2) human PC-3, 3) rat H9C2, 4) rat heart, 5) mouse C2C12 and 6) mouse heart tissue lysate with HSPB2 antibody. Predicted molecular weight ~20 kDa.

Description

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 called it Heat shock 27 protein 2 or Heat shock protein beta 2 and 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 CRYABgene is highly expressed in all three tissues. The two 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.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the HSPB2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the middle region of human HSPB2 (RHPQRLDRHGFVSREFC) was used as the immunogen for this HSPB2 antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the HSPB2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.