

## **Anti-HSPB2 Picoband Antibody**

Catalog # ABO12284

# **Specification**

# **Anti-HSPB2 Picoband Antibody - Product Information**

Application WB
Primary Accession O16082
Host Rabbit
Reactivity Human, Rat
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Heat shock protein beta-2(HSPB2) detection. Tested with WB in Human;Rat.<br/>
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Human;Rat.<br/>
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WB in Human;Rat.<br/>
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Human;Rat.<br/>
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Human;Rat.<br/>
Human;Rat.<br/>
Human;Rat.<br/>
Human;Rat.<br/>
Human;Rat.<br/>
Human;Rat.<br/>
Human;Rat.<br/>
Human;Rat.

### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## **Anti-HSPB2 Picoband Antibody - Additional Information**

**Gene ID 3316** 

#### **Other Names**

Heat shock protein beta-2, HspB2, DMPK-binding protein, MKBP, HSPB2

## Calculated MW 20233 MW KDa

### **Application Details**

Western blot, 0.1-0.5 μg/ml, Rat, Human<br>

### **Subcellular Localization**

Cytoplasm . Nucleus . Localizes to nuclear foci.

### **Tissue Specificity**

Expressed preferentially in skeletal muscle and heart but not in the lens.

## **Protein Name**

Heat shock protein beta-2

## **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

## **Immunogen**

E.coli-derived human HSPB2 recombinant protein (Position: M1-P182). Human HSPB2 shares 97.3% amino acid (aa) sequence identity with both mouse and rat HSPB2.

#### **Purification**

Immunogen affinity purified.



**Cross Reactivity**No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, 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.

**Sequence Similarities** 

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

## **Anti-HSPB2 Picoband Antibody - Protein Information**

Name HSPB2

**Function** 

May regulate the kinase DMPK.

**Cellular Location** 

Cytoplasm. Nucleus. Note=Localizes to nuclear foci

**Tissue Location** 

Expressed preferentially in skeletal muscle and heart but not in the lens

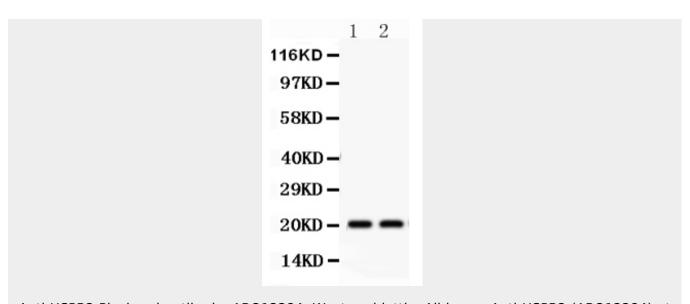
## **Anti-HSPB2 Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **Anti-HSPB2 Picoband Antibody - Images**





Anti-HSPB2 Picoband antibody, ABO12284, Western blottingAll lanes: Anti HSPB2 (ABO12284) at 0.5ug/mlLane 1: Rat Cardiac Muscle Tissue Lysate at 50ugLane 2: Rat Skeletal Muscle Tissue Lysate at 50ugPredicted bind size: 20KDObserved bind size: 20KD

## Anti-HSPB2 Picoband Antibody - 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 DNasel hypersensitive site is located, lwaki 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.