

HSPB6 Rabbit pAb

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Product Information

Application IHC-P, IHC-F, IF

Primary Accession 014558 Reactivity Rat, Dog Host Rabbit Clonality Polyclonal Calculated MW 17136 **Physical State** Liquid

Immunogen KLH conjugated synthetic peptide derived from human HSPB6

Epitope Specificity 6-80/160 Isotype IgG

affinity purified by Protein A **Purity**

Buffer

SUBCELLULAR LOCATION **SIMILARITY**

SUBUNIT Post-translational

modifications

This product as supplied is intended for research use only, not for use in **Important Note**

Homodimer (By similarity). The N-terminus is blocked.

human, therapeutic or diagnostic applications.

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

Background Descriptions

Hsp20 is a small heat shock protein related to Hsp25, Hsp27 and may form different hetercomplexes with these proteins. The specific physiological function of Hsp20 is not yet known. It is distributed ubiquitously in tissues, but is found in higher levels in skeletal, smooth and heart muscle. Under normal conditions, Hsp20 is diffusely distributed in the cytosol, but under heat stress conditions, it translocates to the nucleus. Unlike other heat shock proteins the amount of Hsp20 does not increase after heat shock. The Hsp20 was demonstrated to constitute up to 1.3% of the total cellular protein in vertebrate tissues, especially in muscle, and its expression is related to muscle contraction, specifically in slow-twitch muscle. Hsp20 may form different heterocomplexes with other Hsp's, such as alpha-crystalline and Hsp25. Phosphorylated form of Hsp20 is proposed to interact with monomeric actin whereas dephosphorylated form binds polymeric actin filaments. In normal conditions Hsp20 is diffusely disturbed in cytosol but under the heat stress it undergoes translocation to membrane fraction.

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Cytoplasm. Nucleus. Note=Translocates to nuclear foci during heat shock.

Additional Information

Gene ID 126393

Other Names Heat shock protein beta-6, HspB6, Heat shock 20 kDa-like protein p20, Heat

shock protein family B member 6, HSPB6

Dilution IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name HSPB6

Function Small heat shock protein which functions as a molecular chaperone

probably maintaining denatured proteins in a folding- competent state. Seems to have versatile functions in various biological processes. Plays a role in regulating muscle function such as smooth muscle vasorelaxation and cardiac myocyte contractility. May regulate myocardial angiogenesis implicating KDR. Overexpression mediates cardioprotection and angiogenesis

after induced damage. Stabilizes monomeric YWHAZ thereby supporting

YWHAZ chaperone-like activity.

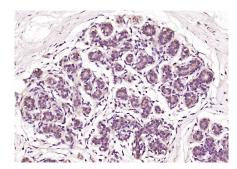
Cellular Location Cytoplasm. Nucleus. Secreted Note=Translocates to nuclear foci during heat

shock

Background

Hsp20 is a small heat shock protein related to Hsp25, Hsp27 and may form different hetercomplexes with these proteins. The specific physiological function of Hsp20 is not yet known. It is distributed ubiquitously in tissues, but is found in higher levels in skeletal, smooth and heart muscle. Under normal conditions, Hsp20 is diffusely distributed in the cytosol, but under heat stress conditions, it translocates to the nucleus. Unlike other heat shock proteins the amount of Hsp20 does not increase after heat shock. The Hsp20 was demonstrated to constitute up to 1.3% of the total cellular protein in vertebrate tissues, especially in muscle, and its expression is related to muscle contraction, specifically in slow-twitch muscle. Hsp20 may form different heterocomplexes with other Hsp's, such as alpha-crystalline and Hsp25. Phosphorylated form of Hsp20 is proposed to interact with monomeric actin whereas dephosphorylated form binds polymeric actin filaments. In normal conditions Hsp20 is diffusely disturbed in cytosol but under the heat stress it undergoes translocation to membrane fraction.

Images



Paraformaldehyde-fixed, paraffin embedded (human breast); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (HSP20) Polyclonal Antibody, Unconjugated (AP56455) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.