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HSP20 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56455

Specification

HSP20 Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, E**
Primary Accession	O14558
Reactivity	**Rat, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**17 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human HSPB6**
Epitope Specificity	**6-80/160**
Isotype	**IgG**
Purity	
affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cytoplasm. Nucleus. Note=Translocates to nuclear foci during heat shock.**
SIMILARITY	**Belongs to the small heat shock protein (HSP20) family.**
SUBUNIT	**Homodimer (By similarity).**
Post-translational modifications	**The N-terminus is blocked.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

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.

HSP20 Polyclonal Antibody - Additional Information

Gene ID 126393

Other Names
Heat shock protein beta-6, HspB6, Heat shock 20 kDa-like protein p20, HSPB6

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ 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 ℃.

HSP20 Polyclonal Antibody - 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

HSP20 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HSP20 Polyclonal Antibody - Images

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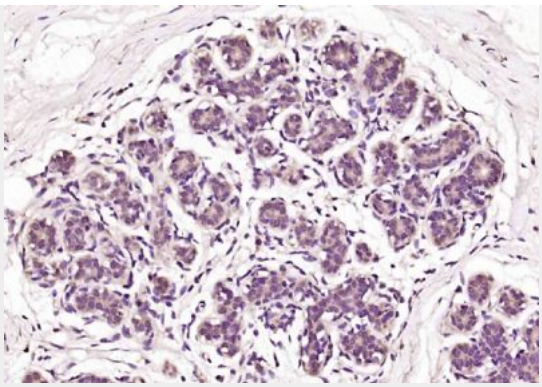

Paraformaldehyde-fixed, paraffin embedded (human breast); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (HSP20) Polyclonal Antibody, Unconjugated (bs-1688R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.