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HSP20 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56455

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	O14558
Reactivity	Rat, Dog, Bovine
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
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.

Additional Information

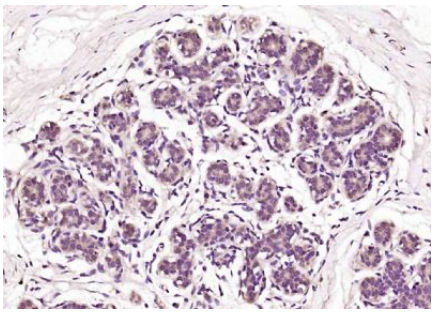
Gene ID	126393
Other Names	Heat shock protein beta-6, HspB6, Heat shock 20 kDa-like protein p20, HSPB6

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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

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.