10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HSPB7 Rabbit pAb

Catalog # AP97841

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9UBY9
Other Accession	Q9UBY9
Reactivity	Rat
Predicted	Human, Mouse, Chicken, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	18611
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HSPB7/cvHSP
Epitope Specificity	101-170/170
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the small heat shock protein (HSP20) family.
SUBUNIT	Interacts with C-terminal domain of actin-binding protein 280.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The heat shock proteins (HSPs) comprise a group of highly conserved, abundantly expressed proteins with diverse functions, including the assembly and sequestering of multiprotein complexes, transportation of nascent polypeptide chains across cellular membranes and regulation of protein folding. Heat shock proteins (also known as molecular chaperones) fall into six general families: HSP 90, HSP 70, HSP 60, the small HSPs, the immunophilins and the HSP 110 family. HSPB7 (heat shock 27kDa protein family, member 7), also known as cvHSP (cardiovascular heat shock protein) or Heat shock protein beta-7, is a member of the small HSP (sHSP) family expressed in heart and skeletal muscle. Members of the sHSP family contain a conserved C-terminal ?crystallin domain and typically function in homo- or heteromeric complexes. The sHSPs bind to denatured proteins and are responsible for preventing the aggregation of these proteins. In response to muscle fiber transformation and in muscular dystrophy, the expression levels of HSPB7 are drastically increased, suggesting that HSPB7 may be a useful target in therapeutic strategies for preventing age-related muscle wasting.

Additional Information

Gene ID	27129
Other Names	cvHSP; HSPB7_HUMAN; HSPB7; Cardiovascular heat shock protein (cvHsp); heat shock protein family B (small) member 7; heat shock 27kD protein family, member 7 (cardiovascular); heat shock 27kDa protein family, member 7 (cardiovascular)

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	HSPB7
Synonyms	CVHSP
Cellular Location	Cytoplasm. Nucleus. Nucleus, Cajal body. Note=Resides in sub-nuclear structures known as SC35 speckles or nuclear splicing speckles
Tissue Location	Isoform 1 is highly expressed in adult and fetal heart, skeletal muscle, and at a much lower levels in adipose tissue and in aorta. Undetectable in other tissues. Isoform 2 and isoform 3 are poorly detected in heart

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