

Datasheet for 600-401-F76

HSPB2 (MKBP) Antibody**Overview**

Description:	Anti-HSPB2 (RABBIT) Antibody - 600-401-F76
Item No.:	600-401-F76
Size:	100 µg
Applications:	IF, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	HSPB2, also known as MKBP is the most divergent member of the sHSP family with only 30% sequence identity to all other mammalian sHSPs. MKBP is known to associate specifically with myotonic dystrophy protein kinase (DMPK) in skeletal muscle. MKBP enhances the kinase activity of DMPK and protects it from heat-induced activation. MKBP also shows a unique nature compared to other sHSPs, in that the expression of MKBP is not induced by heat shock. In unstressed skeletal muscle, MKBP forms large oligomeric complexes with HSPB3 in the cytosol which are localized on mitochondria and the neuromuscular junction. During stress, these complexes dissolve and MKBP's localization to mitochondria increases, leading to increased cell survival. Pinz et al. tried to find a distinct role for MKBP in terms of cardiac mechanics and finds that it is required for normal systolic performance and normal cardiac energetic. HSPB2 has also been found to be expressed in several cancer cell lines, including human breast cancer, suggesting that MKBP may be an important factor in tumor transformation and metastasis.
Synonyms:	DMPK-binding protein, heat shock 27kDa protein 2, Hsp27, HspB2, MKBP, MGC133245, Heat shock protein beta-2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	HSPB2
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Recombinant Protein
Immunogen:	HSPB2 Antibody was produced from whole rabbit serum prepared by repeated immunizations raised against a synthetic peptide.
Purity/Specificity:	Anti-HSPB2 (MKBP) Antibody was purified by affinity chromatography. A BLAST analysis was used to suggest cross-reactivity with HSPB2 (MKBP) from Human, Mouse, and Rat based on 100% homology with the immunizing sequence. Cross-reactivity with HSPB2 (MKBP) from other sources has not been determined. Heat Shock research.
Relevant Links:	• NCBI - NP_001532.1 • GeneID - 3316 • UniProtKB - Q16082

Application Details

Tested Applications:	IF, WB
Application Note:	Anti-HSPB2 (MKBP) Antibody has been tested by WB and IF. Expect a band approximately ~27kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IF:	1:100
WB:	1:1000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of rabbit anti-HSPB2 (MKBP) antibody. Lane 1: Rat Tissue Mix. Primary antibody: HSPB2 antibody at 1:1000 for overnight at 4°C. Secondary antibody: Goat anti-rabbit IgG HRP secondary antibody at 1:10,000 for 45 min at RT. Block: 5% Blotto overnight 4°C. Predicted/Observed size: 20.2 kDa/24 kDa for HSPB2 total. Other band(s): none.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.