

Datasheet for 100-401-F72**HSP90 beta Antibody****Overview**

Description:	Anti-HSP90 beta (RABBIT) Antibody - 100-401-F72
Item No.:	100-401-F72
Size:	100 µL
Applications:	IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details**Background:**

Hsp90 is a highly conserved and essential stress protein that is expressed in all eukaryotic cells. From a functional perspective, hsp90 participates in the folding, assembly, maturation, and stabilization of specific proteins as an integral component of a chaperone complex. Despite its label of being a heat-shock protein, hsp90 is one of the most highly expressed proteins in unstressed cells (1–2% of cytosolic protein). It carries out a number of housekeeping functions – including controlling the activity, turnover, and trafficking of a variety of proteins. Most of the hsp90- regulated proteins that have been discovered to date are involved in cell signaling. The number of proteins now known to interact with Hsp90 is about 100. Target proteins include the kinases v-Src, Wee1, and c-Raf, transcriptional regulators such as p53 and steroid receptors, and the polymerases of the hepatitis B virus and telomerase.⁵ When bound to ATP, Hsp90 interacts with co-chaperones Cdc37, p23, and an assortment of immunophilin-like proteins, forming a complex that stabilizes and protects target proteins from proteasomal degradation. In most cases, hsp90-interacting proteins have been shown to co-precipitate with hsp90 when carrying out immunoadsorption studies, and to exist in cytosolic heterocomplexes with it. In a number of cases, variations in hsp90 expression or hsp90 mutation has been shown to degrade signaling function via the protein or to impair a specific function of the protein (such as steroid binding, kinase activity) in vivo. Ansamycin antibiotics, such as geldanamycin and radicicol, inhibit hsp90 function.

Synonyms:	Hsp84, Hsp90, Hsp90 beta, Hsp90B, HspC2, HSPCB, Heat shock protein HSP 90-beta, HSP 90, Heat shock 84 kDa, HSP 84, HSP84, HSP90AB1, HSP90B, HSPC2, HSPCB
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	HSP90AB1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Recombinant Protein
Immunogen:	Hsp90 beta Antibody was produced from whole rabbit serum prepared by repeated immunizations raised against full length protein Hsp90.
Purity/Specificity:	Anti-Hsp90 beta Antibody was prepared from monospecific antiserum by delipidation and defibrination. A BLAST analysis was used to suggest cross-reactivity with Hsp90 beta from Human, Rat, and Mouse based on 100% homology with the immunizing sequence. Does not cross-react with Hsp90 α . Cross-reactivity with Hsp90 beta from other sources has not been determined. Heat Shock research.
Relevant Links:	• NCBI - NP_031381.2 • GeneID - 3326 • UniProtKB - P08238

Application Details

Tested Applications:	IF, IHC, WB
Application Note:	Anti-Hsp90 beta Antibody has been tested in WB, IHC, IF and is suitable for use in IP and ELISA. 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.
ELISA:	1:200
IF:	10ug/ml
WB:	1:20000-40000

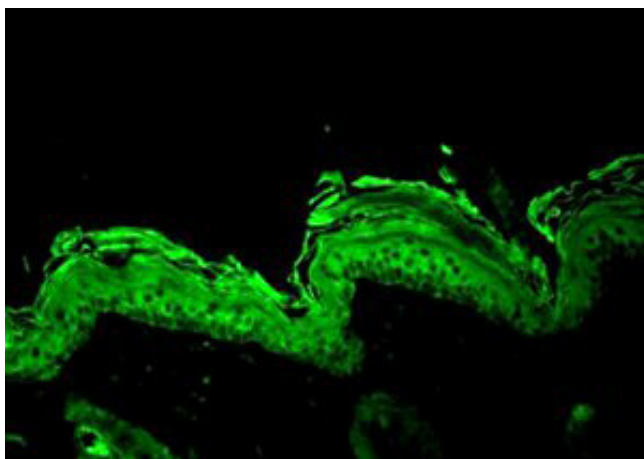
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	85 mg/mL by Refractometry

Shipping & Handling

Shipping Condition:	Dry Ice
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



Immunofluorescence Microscopy

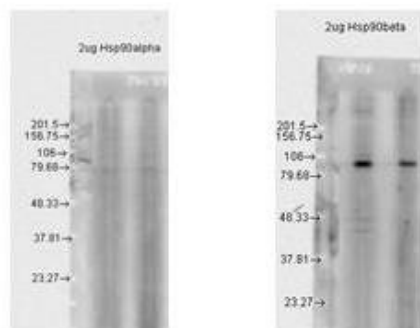
Immunofluorescence of rabbit anti-Hsp90 beta antibody.
 Tissue: backskin sections of transgenic mice. Fixation: fixed, paraffin embedded. Antigen retrieval: not required.
 Primary Antibody: Hsp90 beta antibody at 10ug/ml for 1h at RT. Secondary antibody: fluorescein rabbit secondary at 1:10,000 for 45 min at RT. Localization: cytoplasmic.
 Staining: Hsp90 beta as green fluorescent signal.



Western Blot

Western Blot of rabbit anti-Hsp90 beta antibody. Lane 1: Cell line mix. Lane 2: none. Load: 35 µg per lane. Primary antibody: Hsp90 beta antibody at 1:1000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 83.3 kDa/~90 for Hsp90β. Other band(s): none.

SPC-177 specificity (human hsp90alpha and beta)



Western Blot

Western Blot of rabbit anti-Hsp90 beta antibody. Blot 1: Hsp90 alpha. Blot 2: Hsp90 beta. Load: 2 µg per lane. Primary antibody: Hsp90 beta antibody at 1:1000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 83.3 kDa/~90 for Hsp90 beta only. 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.