

Datasheet for ABIN361718
anti-HSP90 antibody



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Overview

Quantity:	200 µg
Target:	HSP90
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This HSP90 antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP), Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF), Immunocytochemistry (ICC), Antibody Array (AA)

Product Details

Immunogen:	Recombinant human HSP90beta
Clone:	H9010
Isotype:	IgG2a
Specificity:	Detects 90 kDa. Detects HSP90 beta in all reactive species except in Chicken, where it detects both alpha and beta isoforms.
Cross-Reactivity:	Chicken, Dog, Fish, Hamster, Human, Mouse, Rabbit, Rat, Shark
Purification:	Protein G Purified

Target Details

Target:	HSP90
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Target Details

Alternative Name: HSP90 ([HSP90 Products](#))

Background: HSP90 is an abundantly and ubiquitously expressed heat shock protein. It is understood to exist in two principal forms α and β , which share 85 % sequence amino acid homology. The two isoforms of HSP90, are expressed in the cytosolic compartment (1). Despite the similarities, HSP90 α exists predominantly as a homodimer while HSP90 β exists mainly as a monomer (2). From a functional perspective, HSP90 participates in the folding, assembly, maturation, and stabilization of specific proteins as an integral component of a chaperone complex (3-6). Furthermore, HSP90 is highly conserved between species, having 60 % and 78 % amino acid similarity between mammalian and the corresponding yeast and Drosophila proteins, respectively. HSP90 is a highly conserved and essential stress protein that is expressed in all eukaryotic cells. 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 (7-8). 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 (9). For more information visit our HSP90 Scientific Resource Guide at <http://www.HSP90.ca>.

Gene ID: 3326

NCBI Accession: [NP_031381](#)

UniProt: [P08238](#)

Pathways: [M Phase](#), [Regulation of Cell Size](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#), [VEGFR1 Specific Signals](#)

Application Details

Application Notes:	<ul style="list-style-type: none">• WB (1:2500)• IHC (1:100)• optimal dilutions for assays should be determined by the user.
Comment:	1 µg/ml of ABIN361717 was sufficient for detection of HSP90beta in 20 µg of heat shocked HeLa cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS pH 7.2, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	-20°C

Publications

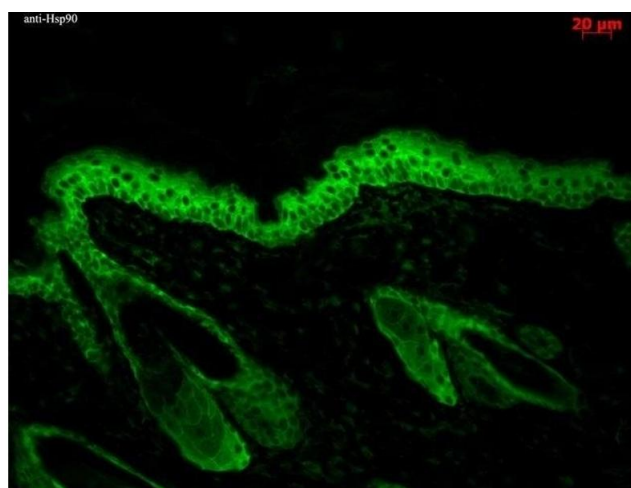
Product cited in:	<p>de la Mare, Jurgens, Edkins: "Extracellular Hsp90 and TGFβ regulate adhesion, migration and anchorage independent growth in a paired colon cancer cell line model." in: BMC cancer, Vol. 17 , Issue 1, pp. 202, (2018) (PubMed).</p> <p>Rodina, Wang, Yan, Gomes, Dunphy, Pillarsetty, Koren, Gerecitano, Taldone, Zong, Caldas-Lopes, Alpaugh, Corben, Riolo, Beattie, Pressl, Peter, Xu, Trondl, Patel, Shimizu, Bolaender, Yang, Panchal et al.: "The epichaperome is an integrated chaperome network that facilitates tumour survival. ..." in: Nature, Vol. 538, Issue 7625, pp. 397-401, (2017) (PubMed).</p> <p>Jayaprakash, Dong, Zou, Bhatia, OBrien, Chen, Woodley, Li: "Hsp90α and Hsp90β together operate a hypoxia and nutrient paucity stress-response mechanism during wound healing." in: Journal of cell science, Vol. 128, Issue 8, pp. 1475-80, (2015) (PubMed).</p>
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Teigen, Orczewska, McLaughlin, OBrien: "Cold acclimation increases levels of some heat shock protein and sirtuin isoforms in threespine stickleback." in: **Comparative biochemistry and physiology. Part A, Molecular & integrative physiology**, Vol. 188, pp. 139-47, (2015) ([PubMed](#)).

Hunter, OHagan, Kenyon, Dhanani, Prinsloo, Edkins: "Hsp90 binds directly to fibronectin (FN) and inhibition reduces the extracellular fibronectin matrix in breast cancer cells." in: **PLoS ONE**, Vol. 9, Issue 1, pp. e86842, (2014) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)

Images



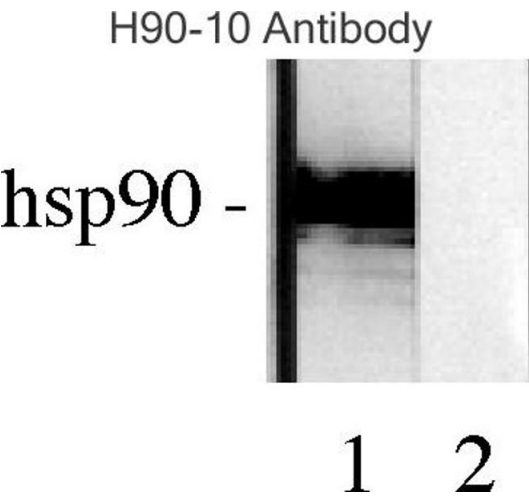
Immunohistochemistry

Image 1. Immunohistochemistry analysis using Mouse Anti-Hsp90 Monoclonal Antibody, Clone H9010 (ABIN361717 and ABIN361718). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-Hsp90 Monoclonal Antibody (ABIN361717 and ABIN361718) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Epidermis.



Western Blotting

Image 2. Hsp90 (H9010) Western Blotting, heat shock Hela.



Western Blotting

Image 3. Rabbit reticulocyte lysate

Please check the [product details page](#) for more images. Overall 11 images are available for ABIN361718.