



Polyclonal Anti- Heat shock protein 90, *HSP90* (Magnetic Bead Conjugate)

Catalogue No. PA1339-M

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminal of human HSP90 (676-693 aa), identical to the related mouse and rat sequence.

Lot No. 0131012123999

Ig type rabbit IgG

Purity

Immunogen affinity purified.

Size 100µg/vial

Contents

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN₃.

Specificity

Human, rat, mouse

No cross reactivity with other proteins.

Storage

Store at 4 °C for frequent use.

Recommended application

ImmunoPrecipitation (IP)

Description

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation.

BACKGROUND

Hsp90 (heat shock protein 90) is a molecular chaperone and is one of the most abundant proteins expressed in cells.^[1] It is a member of the heat shock protein family which is upregulated in response to stress. Hsp90 is found in bacteria and all branches of eukarya, but it is apparently absent in archaea.^[2] Cytoplasmic Hsp90 is essential for viability under all conditions in eukaryotes, the bacterial homologue HtpG is dispensable under non-heat stress conditions.^[3] The function of Hsp90 includes assisting in protein folding, cell signaling, and tumor repression. This protein was first isolated by extracting proteins from stressed cells. These cells were stressed by heating, dehydrating or by other means, all of which caused the cell's proteins to begin to denature.^[4] Researchers later realized that Hsp90 has other essential functions in unstressed cells.

REFERENCE

- 1、 Csermely P, Schnaider T, Soti C, Prohászka Z, Nardai G (August 1998). "The 90-kDa molecular chaperone family: structure, function, and clinical applications. A comprehensive review". *Pharmacol. Ther.* 79 (2): 129–68.
- 2、 Chen B, Zhong D, Monteiro A (2006). "Comparative genomics and evolution of the Hsp90 family of genes across all kingdoms of organisms". *BMC Genomics* 7: 156..
- 3、 Thomas JG, Baneyx F (October 1998). "Roles of the Escherichia coli small heat shock proteins IbpA and IbpB in thermal stress management: comparison with ClpA, ClpB, and HtpG In vivo". *J. Bacteriol.* 180 (19): 5165–72.
- 4、 Prodromou C, Panaretou B, Chohan S, Siligardi G, O'Brien R, Ladbury JE, Roe SM, Piper PW, Pearl LH (August 2000). "The ATPase cycle of Hsp90 drives a molecular 'clamp' via transient dimerization of the N-terminal domains". *EMBO J.* 19 (16): 4383–92.