

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat HSP90 in direct ELISAs and Western blots. Reacts with both recombinant human HSP90 α and HSP90 β isoforms in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 341320
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human HSP90 β Met1-Asp724 Accession # P08238
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

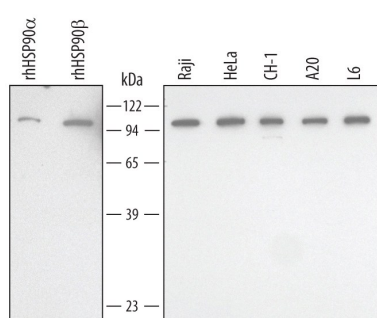
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.25 μ g/mL	See Below
Simple Western	2.5 μ g/mL	See Below

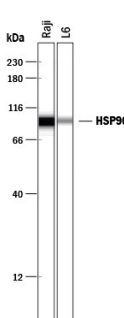
DATA

Western Blot




Detection of Human/Mouse/Rat HSP90 by Western Blot. Western blot shows lysates of Raji human Burkitt's lymphoma cell line and HeLa human cervical epithelial carcinoma cell line, CH-1 mouse B cell lymphoma cell line, A20 mouse B cell lymphoma cell line, and L6 rat myoblast cell line. PVDF membrane was probed with 0.25 μ g/mL Human/Mouse/Rat HSP90 Monoclonal Antibody (Catalog # MAB3286) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). For additional reference, recombinant human HSP90 α and HSP90 β (5 ng/lane) were included. A specific band for HSP90 was detected at approximately 100 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

Simple Western



Detection of Human and Rat HSP90 by Simple Western™. Simple Western lane view shows lysates of Raji human Burkitt's lymphoma cell line and L6 rat myoblast cell line, loaded at 0.2 mg/mL. A specific band was detected for HSP90 at approximately 95 kDa (as indicated) using 2.5 μ g/mL of Mouse Anti-Human/Mouse/Rat HSP90 Monoclonal Antibody (Catalog # MAB3286). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

HSP90 is a composite name for a large group of Heat Shock Proteins whose molecular weights average 90 kDa. HSPs functions primarily as a molecular chaperone, facilitating the folding of other cellular proteins, preventing protein aggregation, or targeting improperly folded proteins to specific degradative pathways. HSP90 is a central component in a number of basic cellular processes including hormone signaling and cell cycle control. HSP90 is ubiquitously expressed, highly conserved and accounts for 1-2% of the total cellular protein. Recently introduced, standardized nomenclature has divided the 17 identified HSP90 genes into three related and one unrelated classes, HSP90AA, HSP90AB, HSP90BB, and TRAP, respectively. Eukaryotic cells have two principal isoforms of HSP90. The antibody described here reacts with the 724 amino acid constitutively expressed HSP90AB1-isoform 1 (also known as HSP90 β , HSP90B, HSPCB, HSPC2, and HSP89 β) and also with the 737 amino acid inducible form, HSP90AA1 (also known as HSP90 α , HSP90A, HSPC1, HSPCA, HSP89 α and LAP2). HSP90AB1-1 and HSP90AA share 90% identity.