Human HSP90α Antibody

Antigen Affinity-purified Polyclonal Rabbit IgG
Catalog Number: AF7247

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human HSP90α in Western blots. In Western blots no cross-reactivity with recombinant human HSP90β is observed.
Source	Polyclonal Rabbit IgG
Purification	Antigen Affinity-purified
Immunogen	Human HSP90 α isoform 1 synthetic peptide Asp702-Met716 Accession # P07900
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

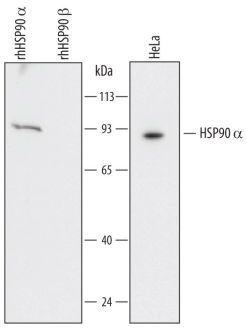
APPLICATIONS

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	0.5 µg/mL	See Below

DATA

Western Blot



Detection of Human HSP90α by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line. PVDF membrane was probed with 0.5 µg/mL of Rabbit Anti-Human HSP90α Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7247) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). For additional reference, recombinant human HSP90α and recombinant human HSP90β (5 ng/lane) were included. A specific band was detected for HSP90α at approximately 90 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
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.** ● 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

The heat shock protein-90 kDa (HSP90) is a composite name for a large group of genes whose molecular weights average 90 kDa. HSP90 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 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, HSP90AA1, HSP90AB, HSP90BB, and TRAP, respectively. Six of these genes were functional while the remaining 11 are considered putative pseudogenes. Eukaryotic cells have two principal forms of HSP90. The AF7247 antibody described here is specific to HSP90 the inducible form, HSP90AA1, also known as HSP90α, HSP90A, HSPC1, HSPCA and HSP86. The other form is a constitutively expressed HSP90AB1 that is a 724 amino acid protein that is also known as HSP90-β, HSP90B, HSPCB, HSPC2, and HSP89-β. HSP90AB1-1 and HSP90AA share 90% identity. In addition to its role as a molecular chaperone and stress response protein, HSP90 is a central component in a number of basic cellular processes including hormone signaling and cell cycle control.