## HSP90α (human), (recombinant)

The Hsp90 family of heat shock proteins represents one of the most abundantly expressed and highly conserved families of cellular chaperones whose expression can be upregulated under conditions of cellular stress, and includes cytoplasmic (Hsp90-alpha/beta), ER (grp94), and mitochondrial (TRAP1) localized members. Structurally, Hsp90 is characterized by an N-terminal ATP-binding domain, a medial substrate-binding domain, and a C-terminal dimerization motif. Hsp90 dimers function in cooperation with cochaperones (e.g. Hsp40, Hsp70, Hop, p23) to stabilize a multitude of client protein substrates, including steroid hormone receptors, protein kinases, and transcription factors. The essential binding and hydrolysis of ATP by Hsp90 is inhibited by ansamycin drugs (e.g. geldanamycin, 17-AAG) which occupy the N-terminal Hsp90 nucleotide-binding pocket. Many Hsp90 client proteins such as erbB2/Her-2, c-raf, bcrabl, p53, and hTERT, are members of well characterized oncogenic pathways, making Hsp90 inhibitors useful anticancer agents.

Citations: 15

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## **Ordering Information**

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ADI-SPP-776-D	50µg
ADI-SPP-776-F	200µg

Manuals, SDS & CofA

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## **Handling & Storage**

**Long Term Storage** -80°C

Shipping Dry Ice

Regulatory Status RUO - Research Use Only

**Product Details** 

Alternative Name HSP86, Heat shock protein 90a

**Application Notes** Western blot control.

Formulation Liquid. In Dulbecco's PBS containing 2.7mM potassium

chloride, 1.5mM potassium phosphate, 137mM sodium chloride, 8.1mM sodium phosphate, and 10% glycerol.

**MW** ~90kDa

Purity ≥90% (SDS-PAGE; Western blot)

Purity Detail Purified by multi-step chromatography.

**Source** Produced in *E. coli*.

UniProt ID P07900

Last modified: May 29, 2024

