Recombinant Protein Technical Manual

Recombinant Human HSP90AA1/HSP90 Protein

RPES1310

Product Data:

Product SKU: RPES1310

Size: 50µg

Species: Human

Expression host: E. coli

Uniprot: NP_005339.3

Protein Information:

Molecular Mass:	22.6 kDa
AP Molecular Mass:	24 kDa
Tag:	
Bio-activity:	
Purity:	> 97 % as determined by reducing SDS-PAGE.
Endotoxin:	Please contact us for more information.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile PBS, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	EL52;HSP86;Hsp89;HSP89A;Hsp90;HSP90A;HSP90N;HSPC1;HSPCA;HSPCAL1;HSPCAL4;HSPN;LAP-2;LAP2

Immunogen Information:

Sequence: Glu 535-Asp 732

Background:

Heat shock protein 90 (90 kDa heat-shock protein, HSP90) is a molecular chaperone involved in the trafficking of proteins in the cell. It is a remarkably versatile protein involved in the stress response and in normal homoeostatic control mechanisms. HSP90 interacts with 'client proteins', including protein kinases, transcription factors and others, and either facilitates their stabilization and activation or directs them for proteasomal degradation. By this means, HSP90 displays a multifaceted ability to influence signal transduction, chromatin remodelling and epigenetic regulation, development and morphological evolution. HSP90 operates as a dimer in a conformational cycle driven by ATP binding and hydrolysis at the N-terminus. Disruption of HSP90 leads to client protein degradation and often cell death. Under stressful conditions, HSP90 stabilizes its client proteins and provides protection to the cell against cellular stressors such as in cancer cells. Especially, several oncoproteins act as HSP90 client proteins and tumor cells require higher HSP90 activity than normal cells to maintain their malignancy. For this reason, Hsp90 has emerged as a promising target for anti-cancer drug development.