

Rabbit Anti-HSP90 alpha antibody

SL10100R

Product Name [KO validated anti] HSP90 alpha

Chinese Name 热休克蛋白 90 α 抗体

Alias

HSP-90 alpha; HSP 86; HSP 86; Renal carcinoma antigen NY REN 38; Heat shock 86 kDa; Heat shock 90kDa protein 1 alpha; Heat shock protein 90kDa alpha (cytosolic) class A member 1; heat shock protein 90kDa alpha (cytosolic), class A member 2; Heat shock protein HSP 90-alpha; HS90A_HUMAN; HSP 86; HSP86; Hsp89; HSP89A; HSP90A; HSP90AA1; HSP90ALPHA; HSP90N; HSPC1; HSPCA; HSPCAL1; HSPCAL3; HSPCAL4; HSPN; LAP2; Renal carcinoma antigen NY-REN-38.

Immunogen Species

Rabbit

Clonality

Polyclonal

React Species

Human, Mouse, (predicted: Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep,)
WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500

Applications

(Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight

81kDa

Cellular localization

cytoplasmic The cell membrane

Form

Liquid

Concentration

1mg/ml

immunogen

KLH conjugated synthetic peptide derived from human HSP90 alpha: 401-500/732

Lsotype

IgG

Purification

affinity purified by Protein A

Buffer Solution

1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage

Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed

[PubMed](#)

Hsp90 (heat shock protein 90) is a molecular chaperone and is one of the most abundant proteins in unstressed cells. It is an ubiquitous molecular chaperone found in eubacteria and all branches of eukarya, but it is apparently absent in archaea. Whereas cytoplasmic Hsp90 is essential for viability under all conditions in eukaryotes, the bacterial homologue HtpG is dispensable under non-heat stress conditions.

Function:

Molecular chaperone that promotes the maturation, structural maintenance and proper regulation of specific target proteins involved for instance in cell cycle control and signal transduction. Undergoes a functional cycle that is linked to its ATPase activity. This cycle probably induces conformational changes in the client proteins, thereby causing their activation. Interacts dynamically with various co-chaperones that modulate its substrate recognition, ATPase cycle and chaperone function.

Subunit:

Homodimer. Interacts with AHSA1, FNIP1, HSF1, SMYD3 and TOM34. Interacts with TERT; the interaction, together with PTGES3, is required for correct assembly and stabilization of the TERT holoenzyme complex. Interacts with CHORDC1 and DNAJC7. Interacts with STUB1 and UBE2N; may couple the chaperone and ubiquitination systems.

**Product
Detail**

Subcellular Location:

Cytoplasm. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Post-translational modifications:

ISGylated.

S-nitrosylated; negatively regulates the ATPase activity and the activation of eNOS by HSP90AA1.

Similarity:

Belongs to the heat shock protein 90 family.

SWISS:

P07900

Gene ID:

3320

Database links:

[Entrez Gene: 3320](#) Human

[Entrez Gene: 15519](#) Mouse

[Entrez Gene: 299331](#) Rat

[Omim: 140571](#) Human

[SwissProt: P07900](#) Human

[SwissProt: P07901](#) Mouse

[SwissProt: P82995](#) Rat

[Unigene: 525600](#) Human

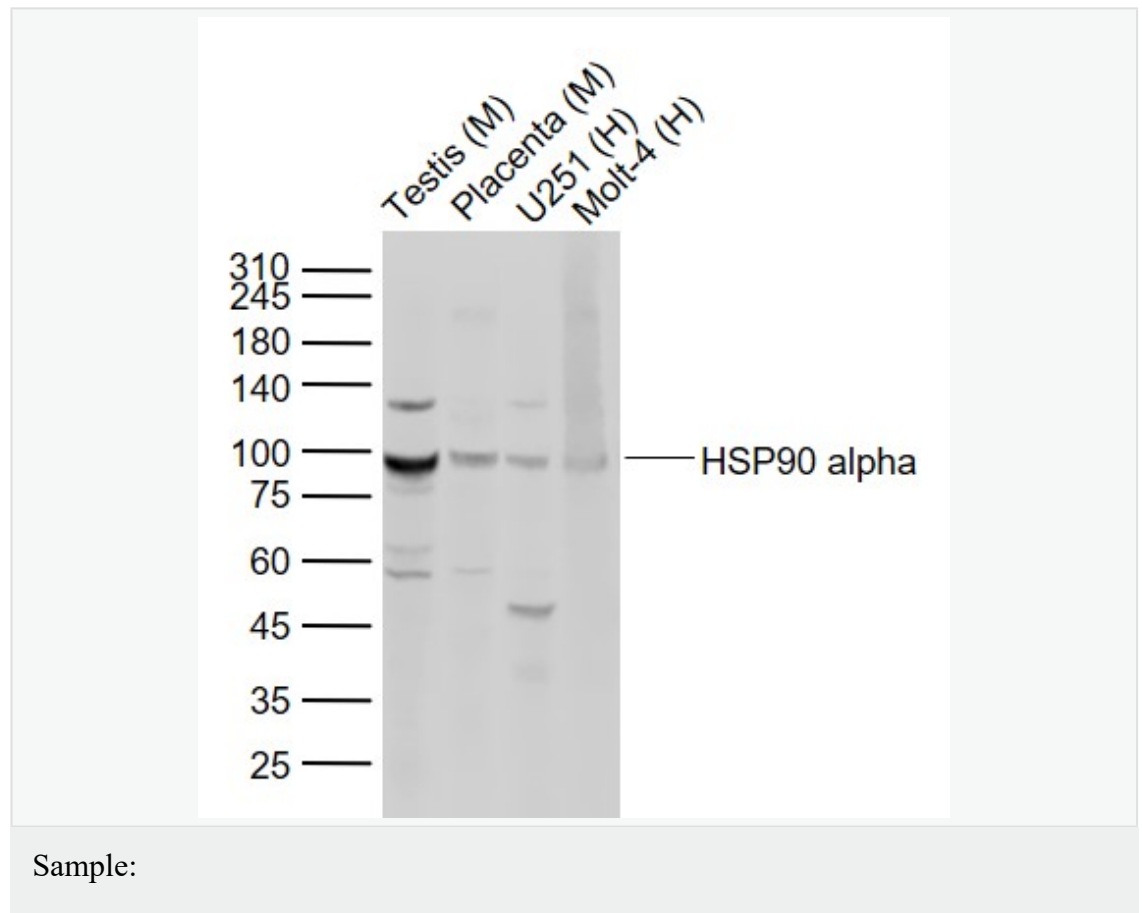
[Unigene: 700831](#) Human

[Unigene: 1843](#) Mouse

[Unigene: 341186](#) Mouse

[Unigene: 119867](#) Rat

**Product
Picture**



Lane 1: Mouse Testis tissue lysates

Lane 2: Mouse Placenta tissue lysates

Lane 3: Human U251 cell lysates

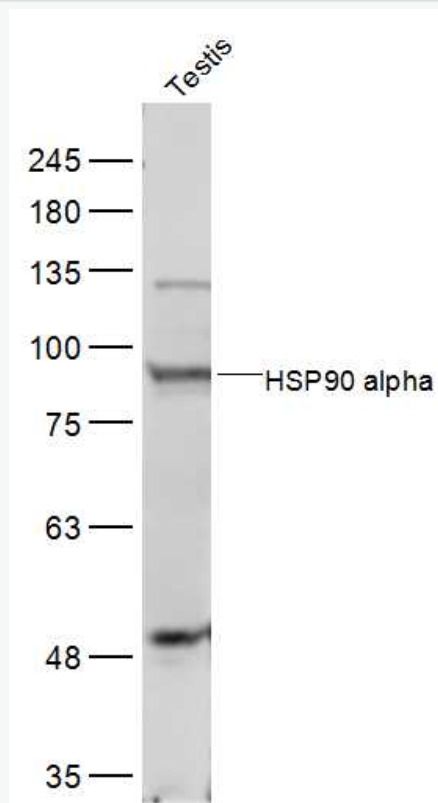
Lane 4: Human Molt-4 cell lysates

Primary: Anti-HSP90 alpha (SL10100R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 81 kD

Observed band size: 90 kD



Sample:

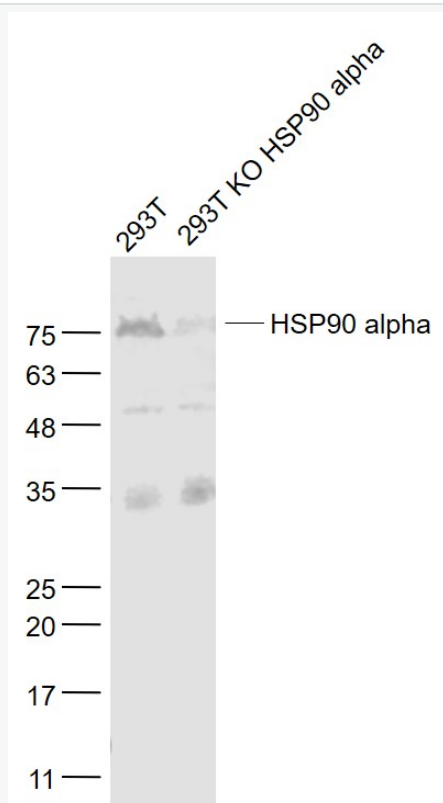
Testis (Mouse) Lysate at 40 ug

Primary: Anti-HSP90 alpha (SL10100R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 81 kD

Observed band size: 98 kD



Sample:

293T(Human) Cell Lysate at 30 ug

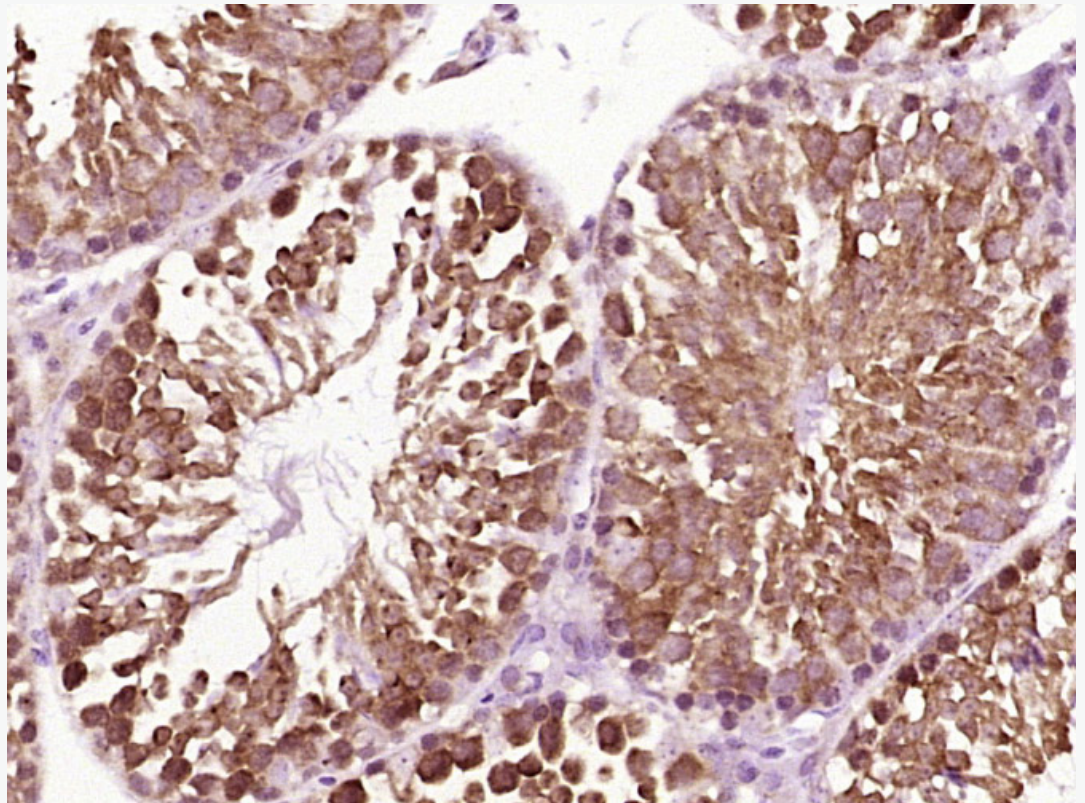
293T KO HSP90 alpha (Human) Cell Lysate at 30 ug

Primary: Anti- HSP90 alpha (SL10100R) at 1/1000 dilution

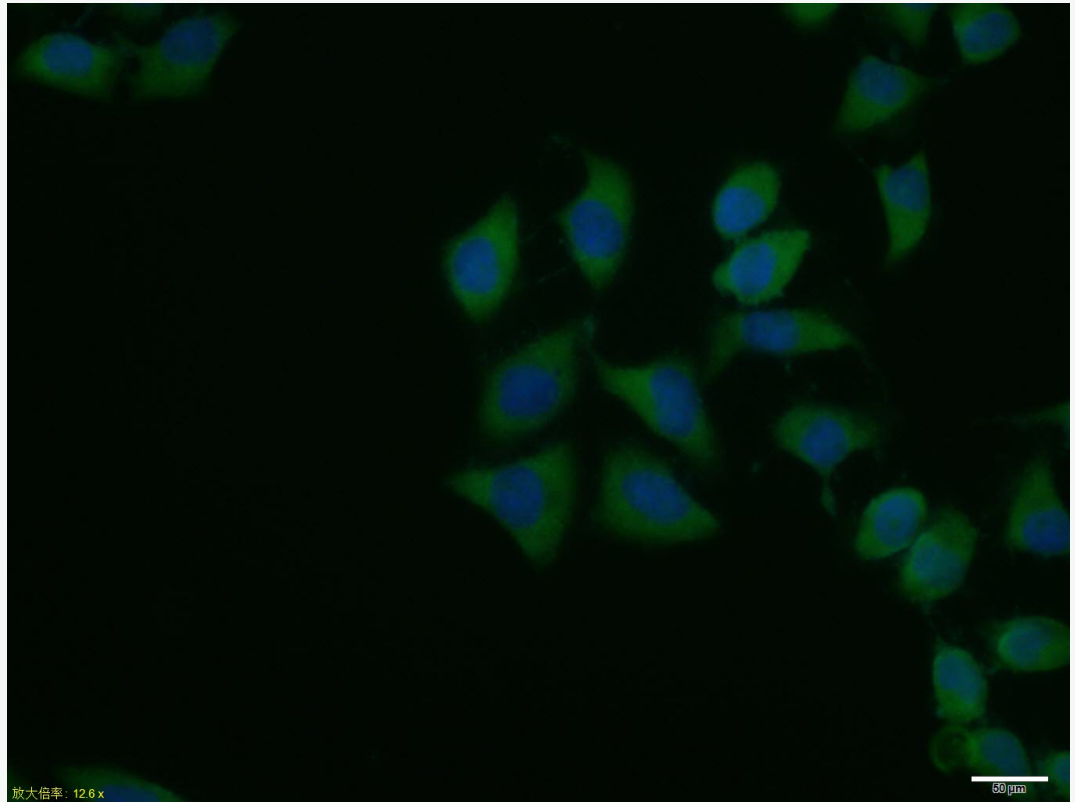
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 81 kD

Observed band size: 77 kD



Paraformaldehyde-fixed, paraffin embedded (mouse testis tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (HSP90 alpha) Polyclonal Antibody, Unconjugated (SL10100R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (HSP90 alpha) polyclonal Antibody, Unconjugated (SL10100R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.