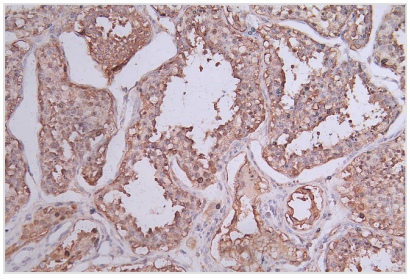
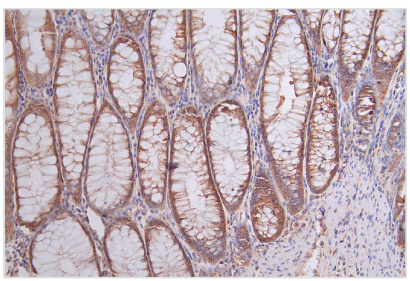
HSP90AB1 Recombinant Monoclonal Antibody

Product Code	CSB-RA644510A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P08238
Immunogen	A synthesized peptide derived from Human HSP90AB1
Species Reactivity	Human
Tested Applications	ELISA, IHC, FC; Recommended dilution: IHC:1:50-1:200, FC:1:50-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Signal transduction
Gene Names	HSP90AB1
Clone No.	7F4

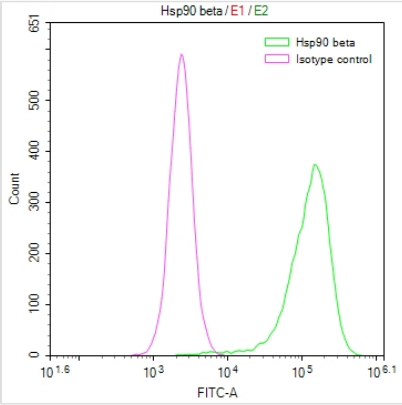
Image



IHC image of CSB-RA644510A0HU diluted at 1:50 and staining in paraffin-embedded human testis tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.74% DAB.



IHC image of CSB-RA644510A0HU diluted at 1:50 and staining in paraffin-embedded human rectal cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.74% DAB.



Overlay Peak curve showing Hela cells stained with CSB-RA644510A0HU (red line) at 1:50. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1μg/1*10^{6}cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?.Control antibody (green line) was rabbit IgG (1μg/1*10^{6}cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

Generating a recombinant monoclonal antibody targeting HSP90AB1 involved several key steps. Initially, a rabbit was immunized with a synthesized peptide derived from human HSP90AB1 protein. B cells were subsequently isolated from the immunized rabbit, and RNA was extracted from these cells. The extracted RNA was reverse-transcribed into cDNA, which was utilized as a template to extend HSP90AB1 antibody genes using degenerate primers. These extended HSP90AB1 antibody genes were then integrated into a plasmid vector and introduced into host cells for expression. The HSP90AB1 recombinant monoclonal antibody was purified from the cell culture supernatant via affinity chromatography and evaluated for its suitability in ELISA, IHC, and FC assays, demonstrating specificity for human HSP90AB1 protein.

HSP90AB1 is a critical molecular chaperone that plays a central role in protein folding, stabilization, and regulation. Its diverse client protein repertoire includes key players in various cellular processes and signaling pathways. HSP90AB1's functions are essential for maintaining cellular homeostasis, adapting to stress, and supporting the proper functioning of numerous proteins with pivotal roles in health and disease.