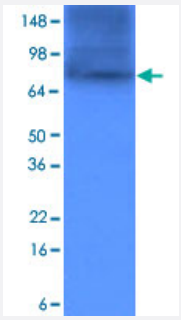
HSP90AA1 monoclonal antibody, clone 4F10

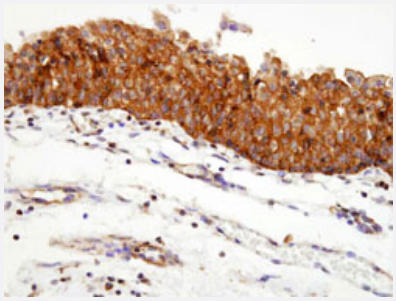
Catalog # MAB1092 Size 100 uL

Applications



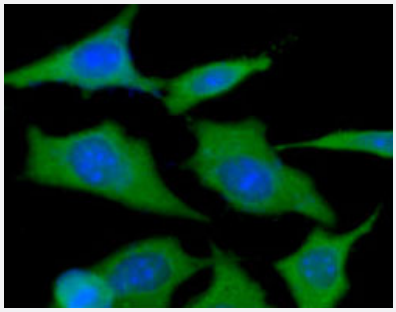
Western Blot (Cell lysate)

Western blot analysis of cell lysates of HeLa (each 20 ug) was resolved by SDS - PAGE , transferred to PVDF membrane and probed with HSP90AA1 monoclonal antibody , clone 4F10 (1 : 1000) (Cat # MAB1092). Proteins were visualized using a goat anti - mouse secondary antibody conjugated to HRP and an ECL detection system.



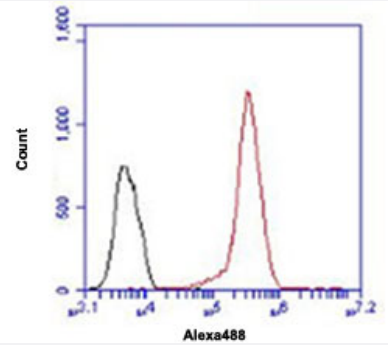
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry of human urothelium were incubated with HSP90AA1 monoclonal antibody, clone 4F10 (1:100) for 2 hours at room temperature. Antigen retrieval was performed in 0.1 M sodium citrate buffer and detected using Diaminobenzidine (DAB).



Immunofluorescence

Immunofluorescence analysis of HeLa cells. The cell was stained with HSP90AA1 monoclonal antibody, clone 4F10 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).



Flow Cytometry

Flow cytometric analysis of HepG2 cell line, staining at 2-5 ug for 1x10^{6}cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).

Specification

Product Description	Mouse monoclonal antibody raised against full length recombinant HSP90AA1.
Immunogen	Recombinant protein corresponding to full length human HSP90AA1.
Host	Mouse
Reactivity	Human
Form	Liquid
Purification	Protein G purification
Isotype	IgG2b, kappa
Recommend Usage	ELISA Flow Cytometry Immunocytochemistry Immunofluorescence Immunohistochemistry Western Blot The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (10% glycerol, 0.02% sodium azide).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

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- Immunocytochemistry

- Immunofluorescence

  Immunofluorescence analysis of HeLa cells. The cell was stained with HSP90AA1 monoclonal antibody, clone 4F10 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

- Enzyme-linked Immunoabsorbent Assay

- Flow Cytometry

  Flow cytometric analysis of HepG2 cell line, staining at 2-5 ug for $1x10^6$cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).

Gene Info — HSP90AA1

Entrez GeneID	3320
GeneBank Accession#	NM_005348
Protein Accession#	NP_005339
Gene Name	HSP90AA1
Gene Alias	FLJ31884, HSP86, HSP89A, HSP90A, HSP90N, HSPC1, HSPCA, HSPCAL1, HSPCAL4, HSPN, Hsp89, Hsp90, LAP2
Gene Description	heat shock protein 90kDa alpha (cytosolic), class A member 1
Omim ID	140571
Gene Ontology	Hyperlink

Gene Summary	HSP90 proteins are highly conserved molecular chaperones that have key roles in signal transduction, protein folding, protein degradation, and morphologic evolution. HSP90 proteins normally associate with other cochaperones and play important roles in folding newly synthesized proteins or stabilizing and refolding denatured proteins after stress. There are 2 major cytosolic HSP90 proteins, HSP90AA1, an inducible form, and HSP90AB1 (MIM 140572), a constitutive form. Other HSP90 proteins are found in endoplasmic reticulum (HSP90B1; MIM 191175) and mitochondria (TRAP1; MIM 606219) (Chen et al., 2005 [PubMed 16269234]).[supplied by OMIM
Other Designations	heat shock 90kD protein 1, alpha|heat shock 90kD protein 1, alpha-like 4|heat shock 90kD protein, alpha-like 4|heat shock 90kDa protein 1, alpha

Publication Reference

- pH-Promoted Release of a Novel Anti-Tumour Peptide by "Stealth" Liposomes: Effect of Nanocarriers on the Drug Activity in Cis-Platinum Resistant Cancer Cells.

  Sacchetti F, Marverti G, D'Arca D, Severi L, Maretti E, Iannuccelli V, Pacifico S, Ponterini G, Costi MP, Leo E.

  Pharmaceutical Research 2018 Sep; 35(11):206.

  Application: WB-Ce, Human, C13* cells

- Mass spectrometric/bioinformatic identification of a protein subset that characterizes the cellular activity of anticancer peptides.

  Genovese F, Gualandi A, Taddia L, Marverti G, Pirondi S, Marraccini C, Perco P, Pelà M, Guerrini R, Amoroso MR, Esposito F, Martello A, Ponterini G, D'Arca D, Costi MP.

  The Journal of Proteome Research 2014 Nov; 13(11):5250.

  Application: WB-Ce, Human, CSD-OC, A2780/CP, IGROV-1 cells

- Increased proliferation of B cells and auto-immunity in mice lacking protein kinase Cdelta.

  Miyamoto A, Nakayama K, Imaki H, Hirose S, Jiang Y, Abe M, Tsukiyama T, Nagahama H, Ohno S, Hatakeyama S, Nakayama KI.

  Nature 2002 Apr; 416(6883):865.

  Application: WB-Ti, Mouse, Brain

- Heat shock protein 90 mediates the balance of nitric oxide and superoxide anion from endothelial nitric-oxide synthase.

  Pritchard KA Jr, Ackerman AW, Gross ER, Stepp DW, Shi Y, Fontana JT, Baker JE, Sessa WC.

  The Journal of Biological Chemistry 2001 May; 276(21):17621.

  Application: WB-Ce, Bovine, Bovine coronary endothelial cells

- Quantitation and intracellular localization of the 85K heat shock protein by using monoclonal and polyclonal antibodies.

  Lai BT, Chin NW, Stanek AE, Keh W, Lanks KW.

  Molecular and Cellular Biology 1984 Dec; 4(12):2802.

Pathway

- Antigen processing and presentation
- Pathways in cancer
- Prostate cancer

Disease

- Asthma
- Cardiovascular Diseases
- Cleft Lip
- Cleft Palate
- Diabetes Mellitus
- Edema