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Product datasheet for TA326371

HSP90AB1 Mouse Monoclonal Antibody [Clone ID: AC-16]

Product data:

Product Type: Primary Antibodies

Clone Name: AC-16
Applications: IHC

Recommend Dilution: 1ug/ml was sufficient for detection of hsp90 by Western Blot in 20ug of HeLa lysate.

Reactivity: Chicken, Fungi, Human, Insect, Mouse, Plant, Rabbit, Rat

Host: Mouse Isotype: IgG2b

Clonality: Monoclonal

Immunogen: Heat shock protein 900 from the water mold Achyla ambisexualis

Formulation: PBS pH7.4, 50% glycerol, 0.09% sodium azide

Concentration: 1 mg/ml

Purification: Protein G Purified

Gene Name: heat shock protein 90kDa alpha family class B member 1

Database Link: NP 031381 Entrez Gene 15516 MouseEntrez Gene 301252 RatEntrez Gene 3326 Human



Background:

Hsp90 is a highly conserved and essential stress protein that is expressed in all eukaryotic cells. From a functional perspective, hsp90 participates in the folding, assembly, maturation, and stabilization of specific proteins as an integral component of a chaperone complex. Despite its label of being a heat-shock protein, hsp90 is one of the most highly expressed proteins in unstressed cells (12% of cytosolic protein). It carries out a number of housekeeping functions including controlling the activity, turnover, and trafficking of a variety of proteins. Most of the hsp90-regulated proteins that have been discovered to date are involved in cell signaling. The number of proteins now know to interact with Hsp90 is about 100. Target proteins include the kinases v-Src, Wee1, and c-Raf, transcriptional regulators such as p53 and steroid receptors, and the polymerases of the hepatitis B virus and telomerase.5 When bound to ATP, Hsp90 interacts with co-chaperones Cdc37, p23, and an assortment of immunophilin-like proteins, forming a complex that stabilizes and protects target proteins from proteasomal degradation. In most cases, hsp90-interacting proteins have been shown to co-precipitate with hsp90 when carrying out immunoadsorption studies, and to exist in cytosolic heterocomplexes with it. In a number of cases, variations in hsp90 expression or hsp90 mutation has been shown to degrade signaling function via the protein or to impair a specific function of the protein (such as steroid binding, kinase activity) in vivo. Ansamycin antibiotics, such as geldanamycin and radicicol, inhibit hsp90 function.

Synonyms: D6S182; HSP84; HSP90B; HSPC2; HSPCB

Note: This antibody is reactive with both the constitutive and the inducible form of Hsp90. It does

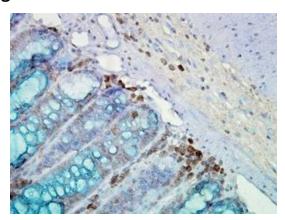
not bind to the native form and does not recognize Hsp90 from E.coli or yeast.

Protein Families: Druggable Genome, Stem cell - Pluripotency

Protein Pathways: Antigen processing and presentation, NOD-like receptor signaling pathway, Pathways in

cancer, Progesterone-mediated oocyte maturation, Prostate cancer

Product images:



IHC staining of inflammatory cells and epithelia mucosa in mouse colon tissues.