

HSP 90 α / β (N-17): sc-1055

BACKGROUND

The heat shock response was first described for *Drosophila* salivary gland cells and morphologically consists of a change in their polytene chromosome puffing patterns that involves *de novo* synthesis of a few proteins. Similar heat shock proteins were later discovered in bacterial, chicken and mammalian cells, and have been subsequently studied in other organisms. A series of proteins including HSP 90, HSP 70, HSP 20-30 and ubiquitin are induced by insults such as temperature shock, chemicals and other environmental stress. A major function of HSP 90 and other HSPs is to act as molecular chaperones. HSP 90 forms a complex with glucocorticoid receptor (GR), rendering the non ligand-bound receptor transcriptionally inactive. HSP 90 binds the GR as a heterocomplex composed of either HSP 56 or Cyclophilin D, forming an aporeceptor complex. HSP 90 also exists as a dimer with other proteins such as p60/sti1 and p23, forming an apo-receptor complex with estrogen and androgen receptors.

SOURCE

HSP 90 α / β (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of HSP 90 α of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1055 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as phycoerythrin conjugate for flow cytometry, sc-1055 PE, 100 tests.

APPLICATIONS

HSP 90 α / β (N-17) is recommended for detection of HSP 90 α and HSP 90 β of mouse, rat, human, *Drosophila melanogaster*, *Xenopus laevis* and zebrafish origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 μ g per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HSP 90 α / β (N-17) is also recommended for detection of HSP 90 α / β in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for HSP 90 α / β siRNA (h): sc-35608, HSP 90 α / β siRNA (m): sc-35610, HSP 90 α / β shRNA Plasmid (h): sc-35608-SH, HSP 90 α / β shRNA Plasmid (m): sc-35610-SH, HSP 90 α / β shRNA (h) Lentiviral Particles: sc-35608-V and HSP 90 α / β shRNA (m) Lentiviral Particles: sc-35610-V.

Molecular Weight of HSP 90 α / β : 90 kDa.

Positive Controls: HSP 90 α (m): 293T Lysate: sc-120913.

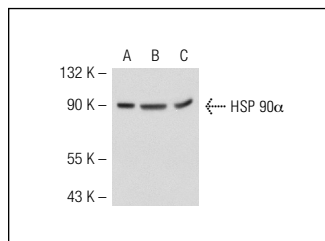
RESEARCH USE

For research use only, not for use in diagnostic procedures.

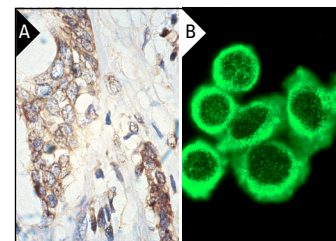
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



HSP 90 α / β (N-17): sc-1055. Western blot analysis of HSP 90 α expression in non-transfected 293T: sc-117752 (A), mouse HSP 90 α transfected 293T: sc-120913 (B) and HeLa (C) whole cell lysates.



HSP 90 α / β (N-17): sc-1055. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue showing cytoplasmic localization (A). Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (B).

SELECT PRODUCT CITATIONS

- Wick, A., et al. 2002. Neuroprotection by hypoxic preconditioning requires sequential activation of vascular endothelial growth factor receptor and Akt. *J. Neurosci.* 22: 6401-6407.
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- Hrizo, S.L. and Palladino, M.J. 2010. Hsp70- and Hsp90-mediated proteasomal degradation underlies TPI sugarkill pathogenesis in *Drosophila*. *Neurobiol. Dis.* 40: 676-683.
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- Ofek, K., et al. 2012. Fluoxetine induces vasodilatation of cerebral arterioles by co-modulating NO/muscarinic signalling. *J. Cell. Mol. Med.* 16: 2736-2744.

MONOS
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Try **HSP 90 α / β (F-8): sc-13119** or **HSP 90 α / β (S88): sc-59578**, our highly recommended monoclonal alternatives to HSP 90 α / β (N-17). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **HSP 90 α / β (F-8): sc-13119**.