

HSP 56 (N-17): sc-1803

BACKGROUND

HSP 56 (also designated FKBP4, FK506 binding protein 4, HBI, p52, FKBP52, FKBP59 and PPlase) is a *cis-trans* prolyl isomerase belonging to the immunophilin protein family. The human HSP 56 gene (FKBP4) has multiple polyadenylation sites and the HSP 56 protein can undergo phosphorylation. HSP 56 influences immunoregulatory gene expression in lymphocytes, protein folding and trafficking. It can serve as a co-chaperone for steroid hormone nuclear receptors to govern appropriate hormone action in target tissues. The protein can associate with phytanoyl-CoA α -hydroxylase (PHYH) and with HSP 90 through a series of tetratricopeptide repeat (TPR) domains. HSP 56 is a TRPC ion channel accessory protein that modulates channel activation following receptor stimulation.

CHROMOSOMAL LOCATION

Genetic locus: FKBP4 (human) mapping to 12p13.33; Fkbp4 (mouse) mapping to 6 F3.

SOURCE

HSP 56 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of HSP 56 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-1803 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

HSP 56 (N-17) is recommended for detection of HSP 56 of mouse, rat and human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HSP 56 (N-17) is also recommended for detection of HSP 56 in additional species, including canine and bovine.

Suitable for use as control antibody for HSP 56 siRNA (h): sc-35602, HSP 56 siRNA (m): sc-35603, HSP 56 shRNA Plasmid (h): sc-35602-SH, HSP 56 shRNA Plasmid (m): sc-35603-SH, HSP 56 shRNA (h) Lentiviral Particles: sc-35602-V and HSP 56 shRNA (m) Lentiviral Particles: sc-35603-V.

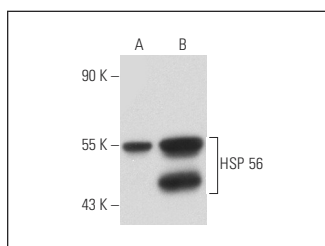
Molecular Weight of HSP 56: 56 kDa.

Positive Controls: HSP 56 (m): 293 Lysate: sc-110751, K-562 whole cell lysate: sc-2203 or HeLa whole cell lysate: sc-2200.

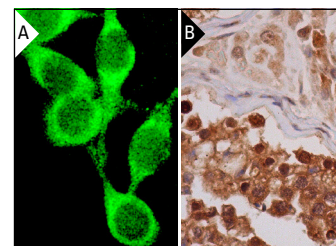
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



HSP 56 (N-17): sc-1803. Western blot analysis of HSP 56 expression in non-transfected: sc-110760 (A) and mouse HSP 56 transfected: sc-110751 (B) 293 whole cell lysates.



HSP 56 (N-17): sc-1803. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic and nuclear staining of cells in seminiferous ducts and Leydig cells (B).

SELECT PRODUCT CITATIONS

- Yong, W., et al. 2007. Essential role for co-chaperone FKBP52 but not FKBP51 in androgen receptor-mediated signaling and physiology. *J. Biol. Chem.* 282: 5026-5036.
- Carroll, C.J., et al. 2011. Transgenic overexpression of HSP56 does not result in cardiac hypertrophy nor protect from ischaemia/reperfusion injury. *Int. J. Biochem. Cell Biol.* 43: 74-79.
- Allan, A.M., et al. 2014. Prenatal alcohol exposure modifies glucocorticoid receptor subcellular distribution in the medial prefrontal cortex and impairs frontal cortex-dependent learning. *PLoS ONE* 9: e96200.

RESEARCH USE

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


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Try **HSP 56 (329.1): sc-100758**, our highly recommended monoclonal alternative to HSP 56 (N-17).