

# HSP 56 (P-14): sc-11507

## BACKGROUND

HSP 56 (also designated FKBP4, FK506 binding protein 4, HBI, p52, FKBP52, FKBP59 and PPIase) 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  $\alpha$ -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 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HSP 56 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-11507 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

HSP 56 (P-14) 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  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (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 (P-14) is also recommended for detection of HSP 56 in additional species, including canine and porcine.

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 (h): 293T Lysate: sc-175155, HSP 56 (m): 293 Lysate: sc-110751 or Jurkat whole cell lysate: sc-2204.

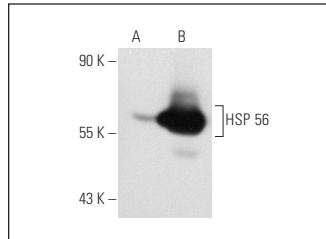
## STORAGE

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

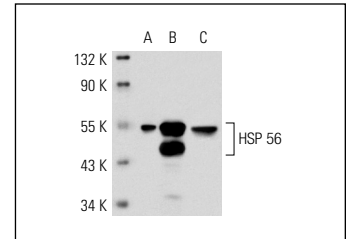
## RESEARCH USE

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

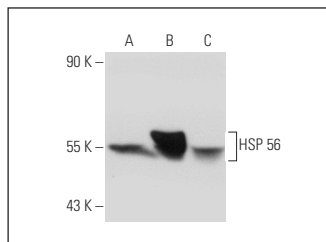
## DATA



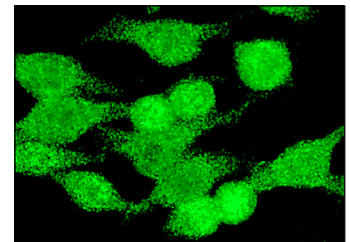
HSP 56 (P-14): sc-11507. Western blot analysis of HSP 56 expression in non-transfected: sc-117752 (A) and mouse HSP 56 transfected: sc-110358 (B) 293T whole cell lysates.



HSP 56 (P-14): sc-11507. Western blot analysis of HSP 56 expression in non-transfected 293T: sc-110760 (A), mouse HSP 56 transfected 293T: sc-110751 (B) and K-562 (C) whole cell lysates.



HSP 56 (P-14): sc-11507. Western blot analysis of HSP 56 expression in non-transfected 293T: sc-117752 (A), human HSP 56 transfected 293T: sc-175155 (B) and Jurkat (C) whole cell lysates.



HSP 56 (P-14): sc-11507. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and nuclear staining.

## SELECT PRODUCT CITATIONS

1. Rees-Unwin, K.S., et al. 2007. Proteomic evaluation of pathways associated with dexamethasone-mediated apoptosis and resistance in multiple myeloma. *Br. J. Haematol.* 139: 559-567.
2. Recktenwald, C.V., et al. 2007. Influence of Ki-Ras-driven oncogenic transformation on the protein network of murine fibroblasts. *Proteomics* 7: 385-398.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **HSP 56 (329.1): sc-100758**, our highly recommended monoclonal alternative to HSP 56 (P-14).