HSP 56 (m): 293 Lysate: sc-110751



The Power to Question

BACKGROUND

HSP 56 (also designated FKBP4, FK-506 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 cochaperone 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.

REFERENCES

- 1. Sumanasekera, W.K., et al. 2003. Heat shock protein 90 (HSP 90) acts as a repressor of peroxisome proliferator-activated receptor α (PPAR α) and PPAR β activity. Biochemistry 42: 10726-10735.
- Galigniana, M.D., et al. 2004. HSP 90-binding immunophilins link p53 to Dynein during p53 transport to the nucleus. J. Biol. Chem. 279: 22483-22489.
- Sanokawa-Akakura, R., et al. 2004. A novel role for the immunophilin FKBP52 in copper transport. J. Biol. Chem. 279: 27845-27848.
- Sinkins, W.G., et al. 2004. Association of immunophilins with mammalian TRPC channels. J. Biol. Chem. 279: 34521-34529.
- 5. Davies, T.H., et al. 2005. FKBP52. Int. J. Biochem. Cell Biol. 37: 42-47.
- 6. Wochnik, G.M., et al. 2005. FK-506-binding proteins 51 and 52 differentially regulate Dynein interaction and nuclear translocation of the glucocorticoid receptor in mammalian cells. J. Biol. Chem. 280: 4609-4616.
- Prince, T., et al. 2005. Evidence for chaperone heterocomplexes containing both HSP 90 and VCP. Biochem. Biophys. Res. Commun. 331: 1331-1337.
- 8. Tranguch, S., et al. 2005. Cochaperone immunophilin FKBP52 is critical to uterine receptivity for embryo implantation. Proc. Natl. Acad. Sci. USA 102: 14326-14331.
- 9. Kim, S.H., et al. 2005. Mitogenic estrogen metabolites alter the expression of 17β -estradiol-regulated proteins including heat shock proteins in human MCF7 breast cancer cells. Mol. Cells 20: 378-384.

CHROMOSOMAL LOCATION

Genetic locus: Fkbp4 (mouse) mapping to 6 F3.

PRODUCT

HSP 56 (m): 293 Lysate represents a lysate of mouse HSP 56 transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

HSP 56 (m): 293 Lysate is suitable as a Western Blotting positive control for mouse reactive HSP 56 antibodies. Recommended use: 10-20 µl per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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