

FKBP10 (m): 293T Lysate: sc-125337

BACKGROUND

The immunophilins are a highly conserved family of *cis-trans* peptidyl-prolyl isomerases that bind to and mediate the effects of immunosuppressive drugs, such as cyclosporin, FK-506 and Rapamycin. Immunophilins have also been implicated in protein folding and trafficking within the endoplasmic reticulum (ER). FKBP10 (FK-506-binding protein 10), also known as peptidyl-prolyl *cis-trans* isomerase, PPlase, Rotamase, 65 kDa FK-506-binding protein or FKBP65, is a 582 amino acid immunophilin localized to the ER lumen and found in many tissues including heart, spleen, brain, testis and lung. FKBP10 contains two EF-hand calcium-binding domains and four PPlase FKBP-type domains, suggesting an enzymatic role in protein folding by catalyzing the *cis-trans* isomerization of proline imidic peptide bonds in oligopeptides. FKBP10 also acts as a receptor for the immunosuppressants FK-506 and Rapamycin, which inhibit FKBP10 activity. FKBP10 is thought to interact with the Raf-1/HSP 90 heterocomplex during signal transduction processes, and may associate with elastin during elastin protein folding and transport. With a valine-24 addition to human FKBP10, human and mouse FKBP10 are almost identical.

REFERENCES

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3. Davis, E.C., et al. 1998. Identification of tropoelastin as a ligand for the 65 kDa FK-506-binding protein, FKBP65, in the secretory pathway. *J. Cell Biol.* 140: 295-303.
4. Göthel, S.F. and Marahiel, M.A. 1999. Peptidyl-prolyl *cis-trans* isomerases, a superfamily of ubiquitous folding catalysts. *Cell. Mol. Life Sci.* 55: 423-436.
5. Patterson, C.E., et al. 2000. Developmental regulation of FKBP65. An ER-localized extracellular matrix binding-protein. *Mol. Biol. Cell* 11: 3925-3935.
6. Patterson, C.E., et al. 2002. Genomic organization of mouse and human 65 kDa FK-506-binding protein genes and evolution of the FKBP multigene family. *Genomics* 79: 881-889.

CHROMOSOMAL LOCATION

Genetic locus: Fkbp10 (mouse) mapping to 11 D.

PRODUCT

FKBP10 (m): 293T Lysate represents a lysate of mouse FKBP10 transfected 293T cells and is provided as 100 µg protein in 200 µl 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.

PROTOCOLS

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

APPLICATIONS

FKBP10 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive FKBP10 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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