

FKBP10 (h): 293 Lysate: sc-112302

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.
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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.
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CHROMOSOMAL LOCATION

Genetic locus: FKBP10 (human) mapping to 17q21.2.

PRODUCT

FKBP10 (h): 293 Lysate represents a lysate of human FKBP10 transfected 293 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.

APPLICATIONS

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

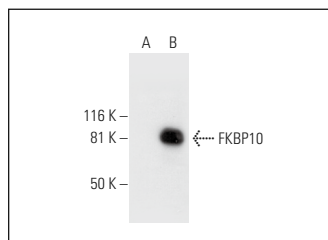
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

FKBP10 (D-4): sc-390538 is recommended as a positive control antibody for Western Blot analysis of enhanced human FKBP10 expression in FKBP10 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



FKBP10 (D-4): sc-390538. Western blot analysis of FKBP10 expression in non-transfected: sc-110760 (A) and human FKBP10 transfected: sc-112302 (B) 293 whole cell lysates.

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.