

FKBP25 (H-170): sc-292411

BACKGROUND

FKBP25 (FK506 binding protein 25), also known as PPlase or FKBP3, is a member of the immunophilin protein family. 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, FK506 and rapamycin. They inhibit T cell proliferation by interrupting two specific cytoplasmic signal transmission pathways. FKBP25 is localized in the nucleus and is expressed in the brain, testis, ovary, and spleen. It may influence immunoregulation and cerebellum development, as well as protein folding and trafficking in neurons. FKBP25 associates with transcriptional repressor protein YY1 and histone deacetylases, HDAC1 and HDAC2. FKBP25 may contain several casein kinase II phosphorylation sites, which are believed to be important for cell growth regulation.

REFERENCES

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- Coss, M.C., et al. 1996. Molecular cloning, DNA sequence analysis, and biochemical characterization of a novel 65-kDa FK506-binding protein (FKBP65). *J. Biol. Chem.* 270: 29336-29341.
- Kitagawa, H., et al. 1997. Cloning and high expression of rabbit FKBP25 in cornea. *Jpn. J. Ophthalmol.* 40: 133-141.
- Johnson, K.L. and Lawen, A. 1999. Rapamycin inhibits didemnin B-induced apoptosis in human HL-60 cells: evidence for the possible involvement of FK506-binding protein 25. *Immunol. Cell Biol.* 77: 242-248.
- Ahn, J., et al. 1999. Downregulation of the stathmin/Op18 and FKBP25 genes following p53 induction. *Oncogene* 18: 5954-5958.
- Yang, W.M., et al. 2001. The FK506-binding protein 25 functionally associates with histone deacetylases and with transcription factor YY1. *EMBO J.* 20: 4814-4825.

CHROMOSOMAL LOCATION

Genetic locus: FKBP3 (human) mapping to 14q21.2; Fkbp3 (mouse) mapping to 12 C1.

SOURCE

FKBP25 (H-170) is a rabbit polyclonal antibody raised against amino acids 1-170 mapping at the N-terminus of FKBP25 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

FKBP25 (H-170) is recommended for detection of FKBP25 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

FKBP25 (H-170) is also recommended for detection of FKBP25 in additional species, including equine, bovine, porcine and canine.

Suitable for use as control antibody for FKBP25 siRNA (h): sc-92113, FKBP25 siRNA (m): sc-145192, FKBP25 shRNA Plasmid (h): sc-92113-SH, FKBP25 shRNA Plasmid (m): sc-145192-SH, FKBP25 shRNA (h) Lentiviral Particles: sc-92113-V and FKBP25 shRNA (m) Lentiviral Particles: sc-145192-V.

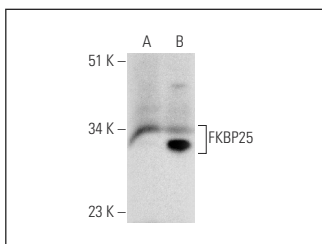
Molecular Weight of FKBP25: 25 kDa.

Positive Controls: FKBP25 (h): 293 Lysate: sc-112220, Jurkat whole cell lysate: sc-2204 or mouse brain extract: sc-2235.

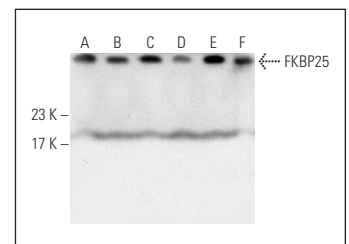
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



FKBP25 (H-170): sc-292411. Western blot analysis of FKBP25 expression in non-transfected: sc-110760 (A) and human FKBP25 transfected: sc-112220 (B) 293 whole cell lysates.



FKBP25 (H-170): sc-292411. Western blot analysis of FKBP25 expression in T-47D (A), MCF7 (B), A431 (C), PC-3 (D) and Jurkat (E) whole cell lysates and mouse brain tissue extract (F).

STORAGE

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

PROTOCOLS

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