

FKBP25 (H-6): sc-374357

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 immuno-regulation 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

1. Hung, D.T., et al. 1992. cDNA cloning of a human 25 kDa FK506 and rapamycin binding protein. *Biochem. Biophys. Res. Commun.* 184: 733-738.
2. Jin, Y.J., et al. 1993. The 25-kDa FK506-binding protein is localized in the nucleus and associates with casein kinase II and nucleolin. *Proc. Natl. Acad. Sci. USA* 90: 7769-7773.
3. Coss, M.C., et al. 1995. Molecular cloning, DNA sequence analysis, and biochemical characterization of a novel 65-kDa FK506-binding protein (FKBP65). *J. Biol. Chem.* 270: 29336-29341.
4. Kitagawa, H., et al. 1996. Cloning and high expression of rabbit FKBP25 in cornea. *Jpn. J. Ophthalmol.* 40: 133-141.
5. Johnson, K.L., et al. 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.

CHROMOSOMAL LOCATION

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

SOURCE

FKBP25 (H-6) is a mouse monoclonal antibody raised against amino acids 1-170 mapping at the N-terminus of FKBP25 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FKBP25 (H-6) is available conjugated to agarose (sc-374357 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374357 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374357 PE), fluorescein (sc-374357 FITC), Alexa Fluor® 488 (sc-374357 AF488), Alexa Fluor® 546 (sc-374357 AF546), Alexa Fluor® 594 (sc-374357 AF594) or Alexa Fluor® 647 (sc-374357 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374357 AF680) or Alexa Fluor® 790 (sc-374357 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

FKBP25 (H-6) is recommended for detection of FKBP25 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

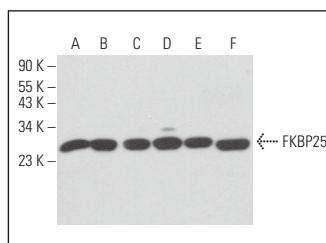
Molecular Weight of FKBP25: 25 kDa.

Positive Controls: A549 cell lysate: sc-2413, 3T3-L1 cell lysate: sc-2243 or Neuro-2A whole cell lysate: sc-364185.

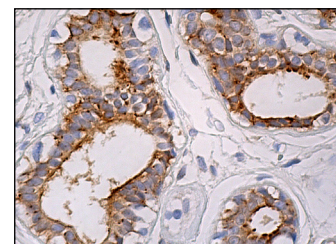
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



FKBP25 (H-6): sc-374357. Western blot analysis of FKBP25 expression in MCF7 (A), A549 (B), 3T3-L1 (C), Neuro-2A (D), L6 (E) and PC-12 (F) whole cell lysates.



FKBP25 (H-6): sc-374357. Immunoperoxidase staining of formalin fixed, paraffin-embedded human breast tissue showing cytoplasmic staining of glandular cells.

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.