FKBP2 (D-9): sc-390753

BACKGROUND
FKBP2 (FK506-binding protein 2), also known as PPlase (peptidyl-prolyl cis-trans isomerase) and FKBP13 (13 kDa FKBP), is a 142 amino acid enzyme that accelerates the folding of proteins. Specifically, FKBP2 catalyzes the cis-trans isomerization of imidic peptide bonds in oligopeptides. Localized to the endoplasmic reticular membrane, FKBP2 is predominantly expressed in thymus and T-cells. FKBP2 is an immunophilin, an intracellular receptor that is inhibited by immunosuppressant drugs such as FK506 and rapamycin. BIG1, a guanine nucleotide exchange factor, and the C-terminus of 4.1G, a protein that stabilizes spectrin-Actin binding, interact with FKBP2. The gene encoding FKBP2 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: FKBP2 (human) mapping to 11q13.1; Fkbp2 (mouse) mapping to 19 A.

SOURCE
FKBP2 (D-9) is a mouse monoclonal antibody raised against amino acids 79-142 mapping to the C-terminus of FKBP2 of human origin.

PRODUCT
Each vial contains 200 µg IgG1, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.
FKBP2 (D-9) is available conjugated to agarose (sc-390753 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390753 HRP), 200 µg/ml, for WB, HICP and ELISA; to either phycoerythrin (sc-390753 PE), fluorescein (sc-390753 FITC), Alexa Fluor® 488 (sc-390753 AF488), Alexa Fluor® 546 (sc-390753 AF546), Alexa Fluor® 594 (sc-390753 AF594) or Alexa Fluor® 647 (sc-390753 AF647), 200 µg/ml, for WB (RGB), IF, HICP and FCM; and to either Alexa Fluor® 680 (sc-390753 AF680) or Alexa Fluor® 790 (sc-390753 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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

APPLICATIONS
FKBP2 (D-9) is recommended for detection of FKBP2 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 1:50-1:1500), 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).


Molecular Weight of FKBP2: 13-16 kDa.
Positive Controls: IMR-32 cell lysate: sc-2409, COLO 205 whole cell lysate: sc-364177 or NIH/3T3 whole cell lysate: sc-2210.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG HRP: sc-516102 or m-IgG 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-IgG BP-FITC: sc-516140 or m-IgG 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-IgG BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA
FKBP2 (D-9): sc-390753. Western blot analysis of FKBP2 expression in IMR-32 (A), COLO 205 (B) and NIH/3T3 (C) whole cell lysates and human brain tissue extract (D).
FKBP2 (D-9): sc-390753. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

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

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.