

FKBP11 (P-14): sc-83821

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, FK506 and Rapamycin. Immunophilins have also been implicated in protein folding and trafficking within the endoplasmic reticulum (ER). FKBP11 (FK506-binding protein 11), also known as FKBP19 or peptidyl-prolyl *cis-trans* isomerase FKBP11, is a 201 amino acid single-pass membrane protein belonging to the FKBP-type PPlase family, a group of proteins known to catalyze the folding of proline-containing polypeptides. Containing one PPlase FKBP-type domain, FKBP11 is expressed in secretory tissues such as pancreas, pituitary, stomach, lymph node and salivary gland, and is encoded by a gene that maps to human chromosome 12q13.12. FK506 and Rapamycin are known to inhibit FKBP11's peptidyl-prolyl isomerase activity.

REFERENCES

- Galat, A. 1993. Peptidylproline *cis-trans*-isomerases: immunophilins. *Eur. J. Biochem.* 216: 689-707.
- 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.
- Patterson, C.E., Gao, J., Rooney, A.P. and Davis, E.C. 2002. Genomic organization of mouse and human 65 kDa FK506-binding protein genes and evolution of the FKBP multigene family. *Genomics* 79: 881-889.
- Breiman, A. and Camus, I. 2002. The involvement of mammalian and plant FK506-binding proteins (FKBPs) in development. *Transgenic Res.* 11: 321-335.
- Galat, A. 2003. Peptidylprolyl *cis-trans* isomerases (immunophilins): biological diversity—targets—functions. *Curr. Top. Med. Chem.* 3: 1315-1347.
- Rulten, S.L., Kinloch, R.A., Tateossian, H., Robinson, C., Gettins, L. and Kay, J.E. 2006. The human FK506-binding proteins: characterization of human FKBP19. *Mamm. Genome* 17: 322-331.
- Online Mendelian Inheritance in Man, OMIM[™]. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610571. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Kang, C.B., Hong, Y., Dhe-Paganon, S. and Yoon, H.S. 2008. FKBP family proteins: immunophilins with versatile biological functions. *Neurosignals* 16: 318-325.

CHROMOSOMAL LOCATION

Genetic locus: FKBP11 (human) mapping to 12q13.12; Fkbp11 (mouse) mapping to 15 F1.

SOURCE

FKBP11 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FKBP11 of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-83821 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FKBP11 (P-14) is recommended for detection of FKBP11 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other FKBP family members.

FKBP11 (P-14) is also recommended for detection of FKBP11 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FKBP11 siRNA (h): sc-75021, FKBP11 siRNA (m): sc-75022, FKBP11 shRNA Plasmid (h): sc-75021-SH, FKBP11 shRNA Plasmid (m): sc-75022-SH, FKBP11 shRNA (h) Lentiviral Particles: sc-75021-V and FKBP11 shRNA (m) Lentiviral Particles: sc-75022-V.

Molecular Weight of FKBP11: 22 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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