

FKBP12 (C-19): sc-6173

BACKGROUND

Immunophilins are a highly conserved family of *cis-trans* peptidyl-prolyl isomerases which bind to and mediate the effects of immunosuppressive drugs such as cyclosporin, FK506 and rapamycin. The prototypic member of the family, FKBP12, was originally identified as a target of FK506 and rapamycin activity. FKBP12 is an abundant, evolutionarily conserved cytoplasmic protein. Although the molecular role of FKBP12 activity is not well understood, the protein has been implicated as a regulator of diverse array of cellular processes including T cell activation, entry into the cell cycle and intracellular calcium release. Interestingly, FKBP12 has been shown to associate with the intracellular cytoplasmic domain of the type I TGF β receptor. This association is constitutive and not dependent on the activation of the receptor.

CHROMOSOMAL LOCATION

Genetic locus: FKBP1A (human) mapping to 20p13, FKBP1B (human) mapping to 20p23.3; Fkbp1a (mouse) mapping to 2 G3, Fkbp1b (mouse) mapping to 12 A1.1.

SOURCE

FKBP12 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of FKBP12 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-6173 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FKBP12 (C-19) is recommended for detection of FKBP12 and, to a lesser extent, FKBP12.6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 μ g per 100-500 μ g 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).

FKBP12 (C-19) is also recommended for detection of FKBP12 and, to a lesser extent, FKBP12.6 in additional species, including equine, canine, bovine and porcine.

Molecular Weight of FKBP12: 12 kDa.

Positive Controls: FKBP12 (m): 293T Lysate: sc-126858, U-937 cell lysate: sc-2239 or mouse brain extract: sc-2253.

STORAGE

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

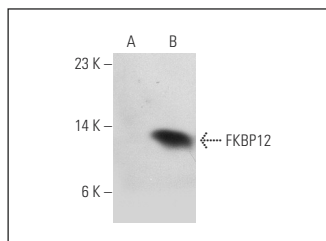
PROTOCOLS

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

RESEARCH USE

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

DATA



FKBP12 (C-19): sc-6173. Western blot analysis of FKBP12 expression in non-transfected: sc-117752 (A) and mouse FKBP12 transfected: sc-126858 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

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- Zhang, Y., et al. 2008. Downregulated FKBP12.6 expression and upregulated endothelin signaling contribute to elevated diastolic calcium and arrhythmogenesis in rat cardiomyopathy produced by l-thyroxin. *Int. J. Cardiol.* 130: 463-471.
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