

# FKBP12 (H-5): sc-133067

## 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 $\beta$  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 2p23.3; Fkbp1a (mouse) mapping to 2 G3, Fkbp1b (mouse) mapping to 12 A1.1.

## SOURCE

FKBP12 (H-5) is a mouse monoclonal antibody raised against amino acids 1-108 representing full length FKBP12 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FKBP12 (H-5) is available conjugated to agarose (sc-133067 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-133067 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-133067 PE), fluorescein (sc-133067 FITC), Alexa Fluor® 488 (sc-133067 AF488), Alexa Fluor® 546 (sc-133067 AF546), Alexa Fluor® 594 (sc-133067 AF594) or Alexa Fluor® 647 (sc-133067 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-133067 AF680) or Alexa Fluor® 790 (sc-133067 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

FKBP12 (H-5) is recommended for detection of FKBP12 and FKBP12.6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

Molecular Weight of FKBP12: 12 kDa.

Positive Controls: Ramos cell lysate: sc-2216, Neuro-2A whole cell lysate: sc-364185 or RPE-J cell lysate: sc-24771.

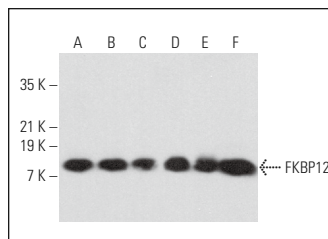
## STORAGE

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

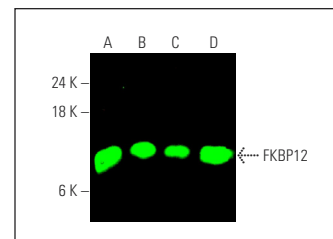
## RESEARCH USE

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

## DATA



FKBP12 (H-5): sc-133067. Western blot analysis of FKBP12 expression in Ramos (A), Jurkat (B), Neuro-2A (C), C6 (D), RPE-J (E) and U-937 (F) whole cell lysates. Detection reagent used: m-IgG $\kappa$  BP-HRP: sc-516102.



FKBP12 (H-5): sc-133067. Near-infrared western blot analysis of FKBP12 expression in WI-38 (A), Ramos (B), Neuro-2A (C) and C6 (D) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgG $\kappa$  BP-CFL 680: sc-516180.

## SELECT PRODUCT CITATIONS

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## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.