



# SZABO SCANDIC

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## Produktinformation



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Diagnostik & molekulare Diagnostik



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### Zuschläge

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- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# FKBP12 (m): 293T Lysate: sc-126858

## 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 a 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.

## REFERENCES

1. Clardy, J. 1995. The chemistry of signal transduction. Proc. Natl. Acad. Sci. USA 92: 56-61.
2. Brown, E.J., Beal, P.A., Keith, C.T., Chen, J., Shin, T.B. and Schreiber, S.L. 1995. Control of p70 S6 kinase by kinase activity of FRAP *in vivo*. Nature 377: 441-446.
3. Cardenas, M.E., Zhu, D. and Heitman, J. 1995. Molecular mechanisms of immunosuppression by cyclosporine, FK506, and Rapamycin. Curr. Opin. Nephrol. Hypertens. 4: 472-477.
4. Fruman, D.A., Bierer, B.E., Benes, J.E., Burakoff, S.J., Austen, K.F. and Katz, H.R. 1995. The complex of FK506-binding protein 12 and FK506 inhibits calcineurin phosphatase activity and IgE activation-induced cytokine transcripts, but not exocytosis, in mouse mast cells. J. Immunol. 154: 1846-1851.
5. Choi, J., Chen, J., Schreiber, S.L. and Clardy, J. 1996. Structure of the FKBP12-Rapamycin complex interacting with the binding domain of human FRAP. Science 273: 239-242.
6. Marks, A.R. 1996. Cellular functions of immunophilins. Physiol. Rev. 76: 631-649.
7. Okadome, T., Oeda, E., Saitoh, M., Ichijo, H., Moses, H.L., Miyazono, K. and Kawabata, M. 1996. Characterization of the interaction of FKBP12 with the transforming growth factor  $\beta$  type I receptor *in vivo*. J. Biol. Chem. 271: 21687-21690.

## CHROMOSOMAL LOCATION

Genetic locus: Fkbp1a (mouse) mapping to 2 G3.

## PRODUCT

FKBP12 (m): 293T Lysate represents a lysate of mouse FKBP12 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## STORAGE

Store at -20 $^{\circ}$  C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## APPLICATIONS

FKBP12 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive FKBP12 antibodies. Recommended use: 10-20  $\mu$ l per lane.

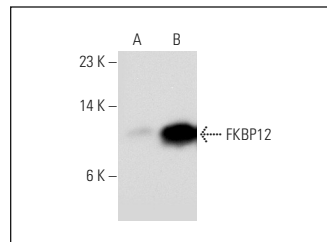
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

FKBP12 (H-5): sc-133067 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse FKBP12 expression in FKBP12 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

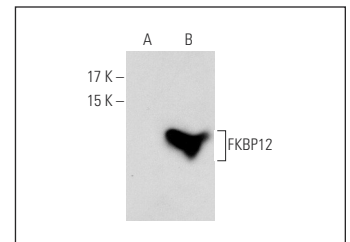
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



FKBP12 (H-5): sc-133067. Western blot analysis of FKBP12 expression in non-transfected: sc-117752 (A) and mouse FKBP12 transfected: sc-126858 (B) 293T whole cell lysates.



FKBP12 (G-4): sc-136962. Western blot analysis of FKBP12 expression in non-transfected: sc-117752 (A) and mouse FKBP12 transfected: sc-126858 (B) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

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