

#8245 Store at -20°C

FKBP5 Antibody



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For Research Use Only. Not For Use In Diagnostic Procedures.

| Applications W Endogenous | Species Cross-Reactivity* H, M, Mk | Molecular Wt. 51 kDa | Source Rabbit** |
|---------------------------------|---------------------------------------|-------------------------|--------------------|
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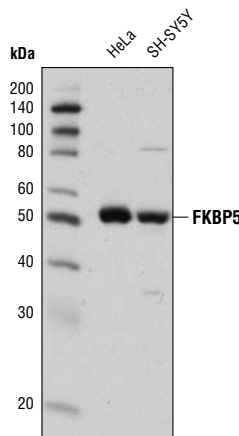
Background: FK506 binding protein 51 (FKBP51, also called FKBP5) belongs to the FKBP family of immunophilins (1). FKBP family proteins contain FK domains and TPR (tetratricopeptide repeat) domains. The FK domains are responsible for their PPIase (peptidylprolyl isomerase) activity and their ability to bind FK506 and Rapamycin (2,3). The C terminal TPR domains are involved in protein-protein interactions. The C terminal TPR domain of FKBP5 androgen and progesterone receptors, which underlies its regulatory role in steroid hormone receptor function (5). FKBP5 also binds to IKK α and is involved in NF- κ B signaling (6,7). Recently, FKBP5 was identified as a negative regulator of Akt (8); it promotes Akt - PHLPP interaction and enhances dephosphorylation of Akt.

Specificity/Sensitivity: FKBP5 Antibody recognizes endogenous levels of total FKBP5 protein. This antibody does not cross-react with FKBP4 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human FKBP5 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- (1) Baughman, G. et al. (1995) *Mol Cell Biol* 15, 4395-402.
- (2) Fruman, D.A. et al. (1994) *FASEB J* 8, 391-400.
- (3) Kang, C.B. et al. (2008) *Neurosignals* 16, 318-25.
- (4) Scheufler, C. et al. (2000) *Cell* 101, 199-210.
- (5) Schülke, J.P. et al. (2010) *PLoS One* 5, e11717.
- (6) Bouwmeester, T. et al. (2004) *Nat Cell Biol* 6, 97-105.
- (7) Avellino, R. et al. (2005) *Blood* 106, 1400-6.
- (8) Pei, H. et al. (2009) *Cancer Cell* 16, 259-66.



Western blot analysis of extracts from HeLa and SH-SY5Y cells using FKBP5 Antibody.

Entrez-Gene ID #2289
Swiss-Prot Acc. #Q13451

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.