

Cyclophilin A Antibody

✓ 100 µl
(10 western blots)

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com

Support ■ 877-678-TECH (8324)
info@cellsignal.com

Web ■ www.cellsignal.com

rev. 08/20/10

This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #5478
Swiss-Prot Acc. #P62937

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R, Mk, (B, Dg)	18 kDa	Rabbit**

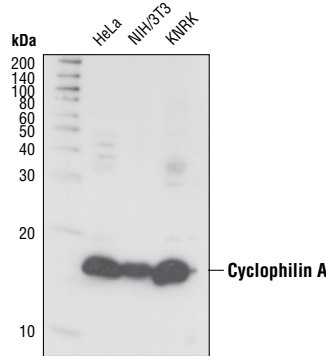
Background: Cyclophilins are a highly conserved family of peptidylprolyl *cis-trans*-isomerases (PPIA) that are targets of the immunosuppressant drug cyclosporin A (CsA) (1,2). The complex of cyclophilin and CsA can bind to and inhibit calcineurin which leads to inhibition of the transcription factor NFAT and decreased production of cytokines (3,4). As isomerases, cyclophilins have been proposed to aid in protein folding. Cyclophilin A can bind to the p55 Gag protein of HIV and appears necessary for HIV infection (5,6). There is also some evidence that cyclophilins can have nuclease activity and play a role in apoptosis (7).

Specificity/Sensitivity: Cyclophilin A Antibody detects endogenous levels of total Cyclophilin A protein.

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

Background References:

- (1) Takahashi, N. et al. (1989) *Nature* 337, 473–475.
- (2) Wang, P. and Heitman, J. (2005) *Genome Biol.* 6, 226.
- (3) Jain, J. et al. (1993) *Nature* 365, 352–355.
- (4) McCaffrey, P.G. et al. (1993) *J. Biol. Chem.* 268, 3747–3752.
- (5) Thali, M. et al. (1994) *Nature* 372, 363–365.
- (6) Streblow, D.N. et al. (1998) *Virology* 245, 197–202.
- (7) Montague, J.W. et al. (1994) *J. Biol. Chem.* 269, 18877–18880.



Western blot analysis of extracts from HeLa (human), NIH/3T3 (mouse) and KNRK (rat) cell lines, using Cyclophilin A Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. 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 nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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.