

# Cyclophilin A Antibody



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	18	Rabbit	#P62937	5478

## Product Usage Information

### Application

Western Blotting

### Dilution

1:1000

## 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.

## Specificity/Sensitivity

Cyclophilin A Antibody detects endogenous levels of total Cyclophilin A protein.

## Species predicted to react based on 100% sequence homology

Bovine, Dog

## 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

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 p53 Gag protein of HIV and appears necessary for HIV infection (5,6). There is also some evidence that cyclophilins have nuclease activity and play a role in apoptosis (7).

## 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.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary 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 Blotting

## Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey

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