



Cyclophilin 40 (m): 293T Lysate: sc-119555

BACKGROUND

Cyclophilins are conserved, ubiquitous and abundant cytosolic peptidyl-prolyl *cis-trans* isomerases that accelerate the isomerization of XaaPro peptide bonds and the refolding of proteins. Human cyclophilin A (CyPA), an intracellular protein of 165 amino acids, is the target of cyclosporin A (CsA) and is encoded by a single unique gene conserved from yeast to humans. Cyclophilin B (CyPB) is secreted in biological fluids such as blood or milk and binds to a specific receptor present on the human lymphoblastic cell line Jurkat and on human peripheral blood lymphocytes. Cyclophilin 40 (CyP40) is a widely expressed cytoplasmic protein that catalyzes the *cis-trans* isomerization of proline imidic peptide bonds in oligopeptides. It is a widely expressed cytoplasmic protein.

REFERENCES

1. Kieffer, L.J., et al. 1993. Cyclophilin-40, a protein with homology to the P59 component of the steroid receptor complex. Cloning of the cDNA and further characterization. *J. Biol. Chem.* 268: 12303-12310.
2. Yokoi, H., et al. 1996. The structure and complete nucleotide sequence of the human Cyclophilin 40 (PPID) gene. *Genomics* 35: 448-455.
3. Gevaert, K., et al. 2003. Exploring proteomes and analyzing protein processing by mass spectrometric identification of sorted N-terminal peptides. *Nat. Biotechnol.* 21: 566-569.
4. Guo, H.X., et al. 2005. Novel Cyclophilin D inhibitors derived from quinoxaline exhibit highly inhibitory activity against rat mitochondrial swelling and Ca²⁺ uptake/ release. *Acta Pharmacol. Sin.* 26: 1201-1211.
5. Schinzel, A.C., et al. 2005. Cyclophilin D is a component of mitochondrial permeability transition and mediates neuronal cell death after focal cerebral ischemia. *Proc. Natl. Acad. Sci. USA* 102: 12005-12010.
6. Schneider, M.D. 2005. Cyclophilin D: knocking on death's door. *Sci. STKE* 2005: pe26.
7. SWISS-PROT/TrEMBL (Q08752). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.ht>

CHROMOSOMAL LOCATION

Genetic locus: Ppid (mouse) mapping to 3 E3.

PRODUCT

Cyclophilin 40 (m): 293T Lysate represents a lysate of mouse Cyclophilin 40 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

Cyclophilin 40 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Cyclophilin 40 antibodies. Recommended use: 10-20 µl per lane.

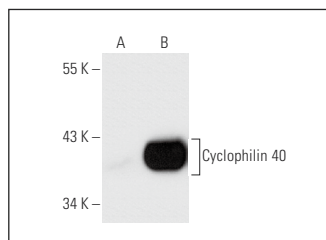
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Cyclophilin 40 (H-8): sc-137136 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Cyclophilin 40 expression in Cyclophilin 40 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

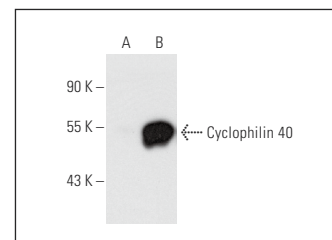
RECOMMENDED SUPPORT REAGENTS

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

DATA



Cyclophilin 40 (H-8): sc-137136. Western blot analysis of Cyclophilin 40 expression in non-transfected: sc-117752 (A) and mouse Cyclophilin 40 transfected: sc-119555 (B) 293T whole cell lysates.



Cyclophilin 40 (F-5): sc-137157. Western blot analysis of Cyclophilin 40 expression in non-transfected: sc-117752 (A) and mouse Cyclophilin 40 transfected: sc-119555 (B) 293T whole cell lysates.

RESEARCH USE

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