

# FKBP14 (S-13): sc-104246

## BACKGROUND

FKBP14 (FK506-binding protein 14), also known as peptidyl-prolyl *cis-trans* isomerase and 22 kDa FK506-binding protein, is a 211 amino acid enzyme that accelerates the folding of proteins during protein synthesis. Localized within the lumen of the endoplasmic reticulum, FKBP14 contains two EF-hand domains and one PPlase FKBP-type domain. Truncation of the amino-terminus of FKBP14 greatly reduces peptidyl prolyl *cis-trans* isomerase activity, therefore suggesting that the PPlase FKBP-type domain must be located at the N-terminus. The gene encoding FKBP14 maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in genes localized to chromosome 7 have been linked to osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: FKBP14 (human) mapping to 7p14.3; *Fkbp14* (mouse) mapping to 6 B3.

## SOURCE

FKBP14 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FKBP14 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-104246 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

FKBP14 (S-13) is recommended for detection of FKBP14 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

FKBP14 (S-13) is also recommended for detection of FKBP14 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FKBP14 siRNA (h): sc-89458, FKBP14 siRNA (m): sc-105354, FKBP14 shRNA Plasmid (h): sc-89458-SH, FKBP14 shRNA Plasmid (m): sc-105354-SH, FKBP14 shRNA (h) Lentiviral Particles: sc-89458-V and FKBP14 shRNA (m) Lentiviral Particles: sc-105354-V.

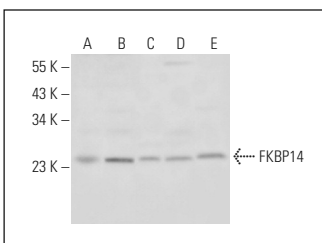
Molecular Weight of FKBP14: 24 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A549 cell lysate: sc-2413 or Hep G2 cell lysate: sc-2227.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



FKBP14 (S-13): sc-104246. Western blot analysis of FKBP14 expression in HEK293 (A), HeLa (B), K-562 (C), Hep G2 (D) and A549 (E) whole cell lysates.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

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