

FKBP10 (E-13): sc-83815

BACKGROUND

The immunophilins are a highly conserved family of *cis-trans* peptidyl-prolyl isomerases that bind to and mediate the effects of immunosuppressive drugs, such as cyclosporin, FK506 and rapamycin. Immunophilins have also been implicated in protein folding and trafficking within the endoplasmic reticulum (ER). FKBP10 (FK506-binding protein 10), also known as peptidyl-prolyl *cis-trans* isomerase, PPlase, Rotamase, 65kDa FK506-binding protein or FKBP65, is a 582 amino acid immunophilin localized to the ER lumen and found in many tissues including heart, spleen, brain, testis and lung. FKBP10 contains two EF-hand calcium-binding domains and four PPlase FKBP-type domains, suggesting an enzymatic role in protein folding by catalyzing the *cis-trans* isomerization of proline imidic peptide bonds in oligopeptides. FKBP10 also acts as a receptor for the immunosuppressants FK506 and rapamycin, which inhibit FKBP10 activity. FKBP10 is thought to interact with the Raf-1/HSP 90 hetero-complex during signal transduction processes, and may associate with elastin during elastin protein folding and transport. With a valine-24 addition to human FKBP10, human and mouse FKBP10 are almost identical.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FKBP10 (human) mapping to 17q21.2; Fkbp10 (mouse) mapping to 11 D.

SOURCE

FKBP10 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FKBP10 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-83815 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FKBP10 (E-13) is recommended for detection of FKBP10 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other FKBP family members.

FKBP10 (E-13) is also recommended for detection of FKBP10 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for FKBP10 siRNA (h): sc-75019, FKBP10 siRNA (m): sc-75020, FKBP10 shRNA Plasmid (h): sc-75019-SH, FKBP10 shRNA Plasmid (m): sc-75020-SH, FKBP10 shRNA (h) Lentiviral Particles: sc-75019-V and FKBP10 shRNA (m) Lentiviral Particles: sc-75020-V.

Molecular Weight of glycosylated FKBP10: 65-72 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200. A-431 whole cell lysate: sc-2201 or SW-13 cell lysate: sc-24778.

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) 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.

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.

PROTOCOLS

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