

FKBP6 (8F10): sc-517136

BACKGROUND

FKBP6 (FK506-binding protein 6), also known as rotamase, immunophilin FKBP36 and peptidyl-prolyl *cis-trans* isomerase FKBP6, is a 327 amino acid protein that, like other PPlases, accelerate the folding of proteins. As a component in synaptonemal complexes, FKBP6 is involved in homologous chromosomes pairing and male infertility in mice. There has been some suggestion that FKBP6 may play a role in modifying the susceptibility to idiopathic spermatogenic impairment in humans. Ubiquitously expressed in all tissues, FKBP6 is present at highest levels in testis, liver, kidney, skeletal muscle and heart. The gene encoding FKBP6 maps within a region of human chromosome 7 that has been implicated in Williams-Beuren syndrome, a rare developmental disorder involving abnormalities of the cardiovascular and musculoskeletal systems. Hemizygous deletion of FKBP6 may contribute to hypercalcemia and growth delay in Williams-Beuren syndrome.

REFERENCES

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- Metcalfe, K., et al. 2005. Autosomal dominant inheritance of Williams-Beuren syndrome in a father and son with haploinsufficiency for FKBP6. *Clin. Dysmorphol.* 14: 61-65.
- Westerveld, G.H., et al. 2005. Mutations in the chromosome pairing gene FKBP6 are not a common cause of non-obstructive azoospermia. *Mol. Hum. Reprod.* 11: 673-675.
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CHROMOSOMAL LOCATION

Genetic locus: FKBP6 (human) mapping to 7q11.23.

SOURCE

FKBP6 (8F10) is a mouse monoclonal antibody raised against amino acids 1-108 representing partial length FKBP6 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

FKBP6 (8F10) is recommended for detection of FKBP6 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

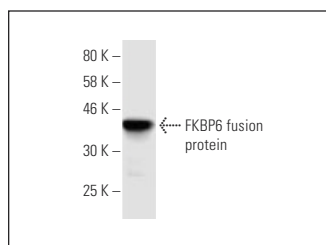
Suitable for use as control antibody for FKBP6 siRNA (h): sc-89491, FKBP6 shRNA Plasmid (h): sc-89491-SH and FKBP6 shRNA (h) Lentiviral Particles: sc-89491-V.

Molecular Weight of FKBP6: 36 kDa.

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, 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).

DATA



FKBP6 (8F10): sc-517136. Western blot analysis of human recombinant FKBP6 fusion protein.

RESEARCH USE

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

PROTOCOLS

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