SANTA CRUZ BIOTECHNOLOGY, INC.

FKBP9 (P-13): sc-104252

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. FKBP9 (FK506-binding protein 9), also known as rotamase, 63 kDa FK506-binding protein and peptidyl-prolyl *cis*-trans isomerase FKBP9, is a 570 amino acid endoplasmic reticular protein that belongs to the FKBP-type PPIase family, a group of proteins known to catalyze the folding of proline-containing polypeptides. FKBP9 is expressed at high levels in mouse lung, kidney, heart and muscle. The gene encoding FKBP9 maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to Osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome.

REFERENCES

1. Gold, B.G. 1997. FK506 and the role of immunophilins in nerve regeneration. Mol. Neurobiol. 15: 285-306.
2. Shadidy, M., Caubit, X., Olsen, R., Seternes, O.M., Moens, U. and Krauss, S. 1999. Biochemical analysis of mouse FKBP60, a novel member of the FKPB family. Biochim. Biophys. Acta 1446: 295-307.
3. Jo, D., Lyu, M.S., Cho, E.G., Park, D., Kozak, C.A. and Kim, M.G. 2001. Identification and genetic mapping of the mouse Fkbp9 gene encoding a new member of FK506-binding protein family. Mol. Cell 12: 272-275.
4. Gilbert, F. 2002. Chromosome 7. Genet. Test. 6: 141-161.
5. Hillier, L.W., Fulton, R.S., Fulton, L.A., Graves, T.A., Pepin, K.H., Wagner-McPherson, C., Layman, D., Maas, J., Jaeger, S., Walker, R., Wylie, K., Sekhon, M., Becker, M.C., O'Laughlin, M.D., et al. 2003. The DNA sequence of human chromosome 7. Nature 424: 157-164.
6. Bhuiyan, Z.A., Hamdan, M.A., Shamsi, E.T., Postma, A.V., Mannens, M.M., Wilde, A.A. and Al-Gazali, L. 2007. A novel early onset lethal form of catecholaminergic polymorphic ventricular tachycardia maps to chromosome 7p14-p22. J. Cardiovasc. Electrophysiol. 18: 1060-1066.
7. Kang, C.B., Hong, Y., Dhe-Paganon, S. and Yoon, H.S. 2008. FKBP family proteins: immunophilins with versatile biological functions. Neurosignals 16: 318-325.

CHROMOSOMAL LOCATION

Genetic locus: FKBP9 (human) mapping to 7p14.3; Fkbp9 (mouse) mapping to 6 B3.

STORAGE

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

PROTOCOLS

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

SOURCE

FKBP9 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FKBP9 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-104252 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FKBP9 (P-13) is recommended for detection of FKBP9 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).

Suitable for use as control antibody for FKBP9 siRNA (h): sc-89450, FKBP9 siRNA (m): sc-105356, FKBP9 shRNA Plasmid (h): sc-89450-SH, FKBP9 shRNA Plasmid (m): sc-105356-SH, FKBP9 shRNA (h) Lentiviral Particles: sc-89450-V and FKBP9 shRNA (m) Lentiviral Particles: sc-105356-V.

Molecular Weight of FKBP9: 63 kDa.

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.

RESEARCH USE

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