SANTA CRUZ BIOTECHNOLOGY, INC.

FUZ (D-22): sc-130665

BACKGROUND

FUZ is a 418 amino acid protein that localizes to both the cytoskeleton and the cytoplasm and is a human homolog of the *Drosophila* fuzzy protein. Existing as three alternatively spliced isoforms, FUZ is thought to be involved in regulating cytoskeletal function and may also play a role in maintaining cell polarity in epithelial cells. The gene encoding FUZ maps to human chromosome 19, which is the genetic home for a number of immunoglobulin superfamily members, including the killer cell and leukocyte Ig-like receptors, several ICAMs, the CEACAM and PSG family and Fc receptors (FcRs). Key genes for eye color and hair color also map to chromosome 19.

REFERENCES

1. Trettel, F., et al. 2000. A fine physical map of the CACNA1A gene region on 19p13.1-p13.2 chromosome. Gene 241: 45-50.
2. Buchet-Poyau, K., et al. 2002. Search for the second Peutz-Jeghers syndrome locus: exclusion of the STK13, PRKCG, KLK10, and PSCD2 genes on chromosome 19 and the STK11IP gene on chromosome 2. Cytogenet. Genome Res. 97: 171-178.
3. Moodie, S.J., et al. 2002. Analysis of candidate genes on chromosome 19 in coeliac disease: an association study of the KIR and LILR gene clusters. Eur. J. Immunogenet. 29: 287-291.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 610622. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Grimwood, J., et al. 2004. The DNA sequence and biology of human chromosome 19. Nature 428: 529-535.
6. Park, T.J., et al. 2006. Ciliogenesis defects in embryos lacking inturned or fuzzy function are associated with failure of planar cell polarity and Hedgehog signaling. Nat. Genet. 38: 303-311.

CHROMOSOMAL LOCATION

Genetic locus: FUZ (human) mapping to 19q13.33; Fuz (mouse) mapping to 7 B4.

SOURCE

FUZ (D-22) is a Protein G purified rabbit polyclonal antibody raised against a synthetic peptide corresponding to amino acids 338-355 of FUZ of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml 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.

RESEARCH USE

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

APPLICATIONS

FUZ (D-22) is recommended for detection of a number of FUZ isoforms ranging from 269-418 amino acids in length of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

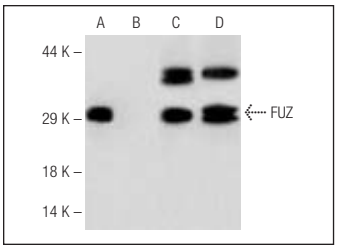
Suitable for use as control antibody for FUZ siRNA (h): sc-97521, FUZ siRNA (m): sc-145277, FUZ shRNA Plasmid (h): sc-97521-SH, FUZ shRNA Plasmid (m): sc-145277-SH, FUZ shRNA (h) Lentiviral Particles: sc-97521-V and FUZ shRNA (m) Lentiviral Particles: sc-145277-V.

Molecular Weight of FUZ: 46 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



FUZ (D-22): sc-130665. Western blot analysis of FUZ expression in human lung tissue extract in the absence (**A**) and the presence (**B**) of immunizing peptide, mouse lung (**C**) tissue extract and rat lung (**D**) tissue extract.

PROTOCOLS

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