SANTA CRUZ BIOTECHNOLOGY, INC.

FGGY (C-9): sc-393376

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

FGGY, also known as FLJ10986, is a 551 amino acid member of the FGGY kinase family that exists as four isoforms which are produced by alternative splicing events. Expressed in lung, kidney, small intestine, liver and fetal brain, FGGY is encoded by a gene that maps to chromosome 1 and, when mutated, is associated with sporadic amyotrophic lateral sclerosis (ALS). ALS is a neurodegenerative disorder that affects motor neurons and results in fatal paralysis, usually within two to five years after initial diagnosis. Chromosome 1, on which the gene encoding FGGY is located, is the largest human chromosome, spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, many of which are associated with genetic diseases, including Hutchinson-Gilford progeria, familial adenomatous polyposis, Stickler syndrome, Gaucher disease and Usher syndrome.

REFERENCES

1. Blackwood, D.H., et al. 2001. Schizophrenia and affective disorders—cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. Am. J. Hum. Genet. 69: 428-433.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611370. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
3. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. Cytogenet. Genome Res. 108: 217-222.
4. Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. Nature 441: 315-321.
5. Hennah, W., et al. 2006. Genes and schizophrenia: beyond schizophrenia: the role of DISC1 in major mental illness. Schizophr. Bull. 32: 409-416.

CHROMOSOMAL LOCATION

Genetic locus: FGGY (human) mapping to 1p32.1; Fggy (mouse) mapping to 4 C5.

SOURCE

FGGY (C-9) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of FGGY of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FGGY (C-9) is available conjugated to agarose (sc-393376 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393376 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393376 PE), fluorescein (sc-393376 FITC), Alexa Fluor® 488 (sc-393376 AF488), Alexa Fluor® 546 (sc-393376 AF546), Alexa Fluor® 594 (sc-393376 AF594) or Alexa Fluor® 647 (sc-393376 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393376 AF680) or Alexa Fluor® 790 (sc-393376 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

FGGY (C-9) is recommended for detection of FGGY of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for FGGY siRNA (h): sc-88466, FGGY siRNA (m): sc-145168, FGGY shRNA Plasmid (h): sc-88466-SH, FGGY shRNA Plasmid (m): sc-145168-SH, FGGY shRNA (h) Lentiviral Particles: sc-88466-V and FGGY shRNA (m) Lentiviral Particles: sc-145168-V.

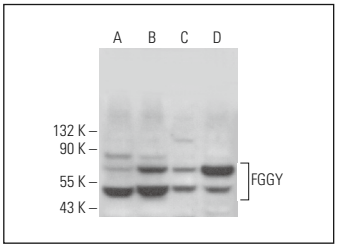
Molecular Weight of FGGY isoforms 1/5: 60/50 kDa.

Positive Controls: human kidney extract: sc-363764, human lung extract: sc-363767 or human small intestine extract: sc-364225.

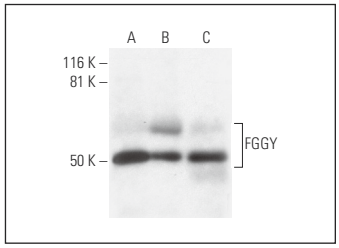
RECOMMENDED SUPPORT REAGENTS

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, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



FGGY (C-9): sc-393376. Western blot analysis of FGGY expression in WI-38 (**A**), Caki-1 (**B**), COLO 205 (**C**) and SW480 (**D**) whole cell lysates.



FGGY (C-9): sc-393376. Western blot analysis of FGGY expression in human kidney (**A**), human lung (**B**) and human small intestine (**C**) tissue extracts.

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 for detailed protocols and support products.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA