# SANTA CRUZ BIOTECHNOLOGY, INC.

# FOP (H-119): sc-292528



BACKGROUND

FOP, also known as FGFR1OP (FGFR1 oncogene partner), is a 399 amino acid protein that localizes to the centrosome and contains one LisH domain. Expressed ubiquitously with highest expression in kidney, heart, muscle, colon, liver, testis and pancreas, FOP functions as a homodimer that interacts with EB1 and CEP350 and is essential for anchoring microtubules to centrosomes. Chromosomal aberrations that involve the FOP gene are associated with the pathogenesis of stem cell myeloproliferative disorder (MPD), a condition that is characterized by eosinophilia and myeloid hyperplasia and ultimately leads to acute myeloid leukemia. FOP is expressed as multiple isoforms that are produced by alternative splicing events.

## REFERENCES

- Popovici, C., Zhang, B., Grégoire, M.J., Jonveaux, P., Lafage-Pochitaloff, M., Birnbaum, D. and Pébusque, M.J. 1999. The t(6;8)(q27;p11) translocation in a stem cell myeloproliferative disorder fuses a novel gene, FOP, to fibro-blast growth factor receptor 1. Blood 93: 1381-1389.
- 2. Reither, A., Hehlmann, R., Goldman, J.M. and Cross, N.C. 1999. The 8p11 myeloproliferative syndrome. Med. Klin. 94: 207-210.
- Guasch, G., Ollendorff, V., Borg, J.P., Birnbaum, D. and Pébusque, M.J. 2001. 8p12 stem cell myeloproliferative disorder: the FOP-fibroblast growth factor receptor 1 fusion protein of the t(6;8) translocation induces cell survival mediated by mitogen-activated protein kinase and phosphatidylinositol 3-kinase/Akt/mTOR pathways. Mol. Cell. Biol. 21: 8129-8142.
- 4. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 605392. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

#### CHROMOSOMAL LOCATION

Genetic locus: FGFR10P (human) mapping to 6q27; Fgfr1op (mouse) mapping to 17 A1.

## SOURCE

FOP (H-119) is a rabbit polyclonal antibody raised against amino acids 8-126 mapping near the N-terminus of FOP of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **STORAGE**

Store at 4° C, \*\*D0 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.

## APPLICATIONS

FOP (H-119) is recommended for detection of FOP of mouse, rat and 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

FOP (H-119) is also recommended for detection of FOP in additional species, including bovine and porcine.

Suitable for use as control antibody for FOP siRNA (h): sc-75050, FOP siRNA (m): sc-75051, FOP shRNA Plasmid (h): sc-75050-SH, FOP shRNA Plasmid (m): sc-75051-SH, FOP shRNA (h) Lentiviral Particles: sc-75050-V and FOP shRNA (m) Lentiviral Particles: sc-75051-V.

Molecular Weight of FOP: 43 kDa.

Positive Controls: CTLL-2 cell lysate: sc-2242, mouse thymus extract: sc-2406 or HeLa whole cell lysate: sc-2200.

#### DATA





FOP (H-119): sc-292528. Western blot analysis of FOP expression in CTLL-2 whole cell lysate ( $\pmb{A}$ ) and mouse thymus tissue extract ( $\pmb{B}$ ).

FOP (H-119): sc-292528. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic and nuclear staining of cells in seminiferous ducts and Leydig cells.

# **RESEARCH USE**

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



Try **FOP (B-1): sc-374340**, our highly recommended monoclonal alternative to FOP (H-119).