SANTA CRUZ BIOTECHNOLOGY, INC.

FNBP2 (G-10): sc-398399

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

FNBP2 (formin binding protein 2), also known as SRGAP3, ARHGAP34 or SRGAP2 (SLIT-ROBO Rho GTPase activating protein 2), is a 1,071 amino acid protein that is expressed at at low levels in placenta, kidney and ovary. Containing a FCH (Fps/Fes/Fer/CIP4 homology) domain, a Rho-GAP domain and a SH3 (Src homology 3) domain, FNBP2 is considered a putative GTPase-activating protein for Rho family small GTPases. Rho GTPases are molecular switches that regulate many essential cellular processes, including Actin dynamics, cell adhesion, cell-cycle progression and transcription. The FNBP2 family includes such proteins as SRGAP1, WRP (WAVE-associated Rac GTPase-activating protein) and ARHGAP4, which are characterized by FCH, FBH, RhoGAP and SH3 domains, and may have a part in cell migration and axon guidance.

REFERENCES

1. Chan, D.C., et al. 1996. Formin binding proteins bear WWP/WW domains that bind proline-rich peptides and functionally resemble SH3 domains. EMBO J. 15: 1045-1054.
2. Wong, K., et al. 2001. Signal transduction in neuronal migration: roles of GTPase activating proteins and the small GTPase Cdc42 in the Slit-Robo pathway. Cell 107: 209-221.

CHROMOSOMAL LOCATION

Genetic locus: SRGAP2 (human) mapping to 1q32.1; Srgap2 (mouse) mapping to 1 E4.

SOURCE

FNBP2 (G-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1038-1060 at the C-terminus of FNBP2 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.

FNBP2 (G-10) is available conjugated to agarose (sc-398399 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398399 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398399 PE), fluorescein (sc-398399 FITC), Alexa Fluor® 488 (sc-398399 AF488), Alexa Fluor® 546 (sc-398399 AF546), Alexa Fluor® 594 (sc-398399 AF594) or Alexa Fluor® 647 (sc-398399 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398399 AF680) or Alexa Fluor® 790 (sc-398399 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398399 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

FNBP2 (G-10) is recommended for detection of FNBP2 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 FNBP2 siRNA (h): sc-88206, FNBP2 siRNA (m): sc-105368, FNBP2 shRNA Plasmid (h): sc-88206-SH, FNBP2 shRNA Plasmid (m): sc-105368-SH, FNBP2 shRNA (h) Lentiviral Particles: sc-88206-V and FNBP2 shRNA (m) Lentiviral Particles: sc-105368-V.

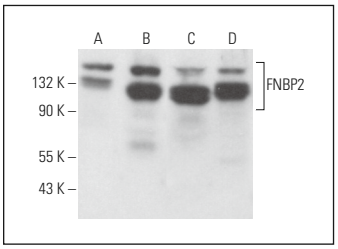
Molecular Weight of FNBP2: 121 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, SH-SY5Y cell lysate: sc-3812 or Caki-1 cell lysate: sc-2224.

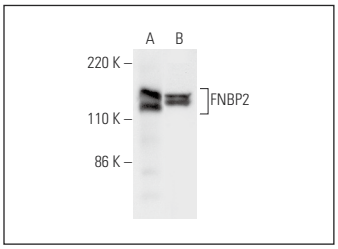
RECOMMENDED SUPPORT REAGENTS

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



FNBP2 (G-10): sc-398399. Western blot analysis of FNBP2 expression in Caki-1 (**A**), SK-N-SH (**B**), 3T3-L1 (**C**) and KNRK (**D**) whole cell lysates.



FNBP2 (G-10): sc-398399. Western blot analysis of FNBP2 expression in SH-SY5Y (**A**) and Caki-1 (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Ren, C., et al. 2019. Leukocyte cytoskeleton polarization is initiated by plasma membrane curvature from cell attachment. Dev. Cell 49: 206-219.e7.
2. Wang, H., et al. 2023. The evaluation of Rac1 signaling as a potential therapeutic target of Alzheimer's disease. Int. J. Mol. Sci. 24: 11880.

RESEARCH USE

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