SANTA CRUZ BIOTECHNOLOGY, INC.

CIP29 (F-4): sc-514567

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CIP29 (cytokine-induced protein of 29 kDa), also known as SARNP (SAP domain-containing ribonucleoprotein) and HCC1 (nuclear protein Hcc-1), is a 210 amino acid nuclear protein whose expression is upregulated by erythropoietin. Induction of CIP2 expression is associated with cell cycle progression and apoptosis. This transcription factor binds both single stranded (ss) and double stranded (ds) DNA, though it has higher affinity for ssDNA. CIP29 is expressed at low levels in pancreas, spleen, testis, liver, kidney, heart and thymus, and is found to be expressed at higher levels in pancreatic adenocarcinoma and hepatocellular carcinoma. A translocation t(11;12)(q23;q13) in acute myelomonocytic leukemia results in the coding region of CIP29 gene fused to exon 9 of the MLL gene, which encodes for a protein with the N-terminal SAP domain and two C-terminal nuclear localization signals of CIP29 and N-termial AT hooks and central DNA methyltransferase homology region of MLL.

REFERENCES

1. Choong, M.L., et al. 2001. An integrated approach in the discovery and characterization of a novel nuclear protein over-expressed in liver and pancreatic tumors. FEBS Lett. 496: 109-116.
2. Fukuda, S., et al. 2002. Cloning and characterization of a proliferation-associated cytokine-inducible protein, CIP29. Biochem. Biophys. Res. Commun. 292: 593-600.
3. Leaw, C.L., et al. 2004. Hcc-1 is a novel component of the nuclear matrix with growth inhibitory function. Cell. Mol. Life Sci. 61: 2264-2273.

CHROMOSOMAL LOCATION

Genetic locus: SARNP (human) mapping to 12q13.2; Sarnp (mouse) mapping to 10 D3.

SOURCE

CIP29 (F-4) is a mouse monoclonal antibody raised against amino acids 77-210 mapping at the C-terminus of CIP29 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CIP29 (F-4) is available conjugated to agarose (sc-514567 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514567 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514567 PE), fluorescein (sc-514567 FITC), Alexa Fluor® 488 (sc-514567 AF488), Alexa Fluor® 546 (sc-514567 AF546), Alexa Fluor® 594 (sc-514567 AF594) or Alexa Fluor® 647 (sc-514567 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514567 AF680) or Alexa Fluor® 790 (sc-514567 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

CIP29 (F-4) is recommended for detection of CIP29 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 CIP29 siRNA (h): sc-96155, CIP29 siRNA (m): sc-142345, CIP29 shRNA Plasmid (h): sc-96155-SH, CIP29 shRNA Plasmid (m): sc-142345-SH, CIP29 shRNA (h) Lentiviral Particles: sc-96155-V and CIP29 shRNA (m) Lentiviral Particles: sc-142345-V.

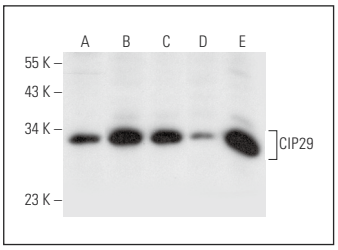
Molecular Weight of CIP29: 29 kDa.

Positive Controls: A-375 cell lysate: sc-3811, Hep G2 cell lysate: sc-2227 or HeLa nuclear extract: sc-2120.

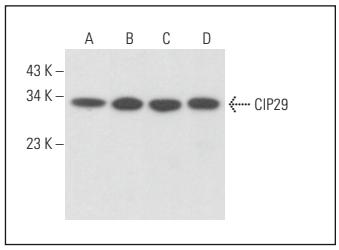
RECOMMENDED SUPPORT REAGENTS

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



CIP29 (F-4): sc-514567. Western blot analysis of CIP29 expression in Hep G2 (**A**), MIA PaCa-2 (**B**), NCI-H1299 (**C**) and A-375 (**D**) whole cell lysates and HeLa nuclear extract (**E**).



CIP29 (F-4): sc-514567. Western blot analysis of CIP29 expression in MIA PaCa-2 (**A**), HeLa (**B**) and Jurkat (**C**) whole cell lysates and human tonsil tissue extract (**D**).

SELECT PRODUCT CITATIONS

1. Kang, G.J., et al. 2020. SARNP, a participant in mRNA splicing and export, negatively regulates E-cadherin expression via interaction with pinin. J. Cell. Physiol. 235: 1543-1555.

RESEARCH USE

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