

CIP4 (F-10): sc-166810



The Power to Question

BACKGROUND

CIP4 (Cdc42-interacting protein 4), also known as TRIP10 (thyroid hormone receptor interactor 10), STOT, STP or HSTP, is a 601 amino acid protein that localizes to the cytoplasm and the cytoskeleton, as well as to the lysosome and the Golgi apparatus and contains one FCH domain, one SH3 domain and one REM repeat. Expressed in a variety of tissues, including kidney, brain, liver, lung, heart and pancreas, CIP4 is required for the Insulin-dependent translocation of Glut4 to the plasma membrane and is essential for the coordination of membrane tubulation with Actin cytoskeletal reorganization during endocytosis. CIP4 exists as multiple alternative spliced isoforms and is subject to posttranslational tyrosine phosphorylation. Aberrant splicing events during CIP4 transcription are associated with the pathogenesis of renal cell carcinoma, suggesting a role for CIP4 in tumor transformation and metastasis.

CHROMOSOMAL LOCATION

Genetic locus: TRIP10 (human) mapping to 19p13.3; Trip10 (mouse) mapping to 17 D.

SOURCE

CIP4 (F-10) is a mouse monoclonal antibody raised against amino acids 467-558 mapping within an internal region of CIP4 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.

CIP4 (F-10) is available conjugated to agarose (sc-166810 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166810 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166810 PE), fluorescein (sc-166810 FITC), Alexa Fluor® 488 (sc-166810 AF488), Alexa Fluor® 546 (sc-166810 AF546), Alexa Fluor® 594 (sc-166810 AF594) or Alexa Fluor® 647 (sc-166810 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166810 AF680) or Alexa Fluor® 790 (sc-166810 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

CIP4 (F-10) is recommended for detection of CIP4 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), 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).

Suitable for use as control antibody for CIP4 siRNA (h): sc-72910, CIP4 siRNA (m): sc-72911, CIP4 shRNA Plasmid (h): sc-72910-SH, CIP4 shRNA Plasmid (m): sc-72911-SH, CIP4 shRNA (h) Lentiviral Particles: sc-72910-V and CIP4 shRNA (m) Lentiviral Particles: sc-72911-V.

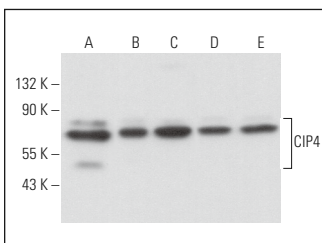
Molecular Weight of CIP4: 75 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Sol8 cell lysate: sc-2249 or NIH/3T3 whole cell lysate: sc-2210.

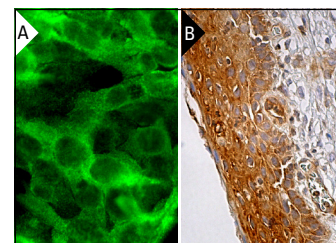
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CIP4 (F-10): sc-166810. Western blot analysis of CIP4 expression in HeLa (A), U-2 OS (B), NIH/3T3 (C), Sol8 (D) and C2C12 (E) whole cell lysates.



CIP4 (F-10): sc-166810. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic and membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human cervix tissue showing cytoplasmic staining of squamous epithelial cells (B).

SELECT PRODUCT CITATIONS

1. Cerqueira, O.L., et al. 2015. CIP4 promotes metastasis in triple-negative breast cancer and is associated with poor patient prognosis. *Oncotarget* 6: 9397-9408.
2. Erasmus, J.C., et al. 2016. Defining functional interactions during biogenesis of epithelial junctions. *Nat. Commun.* 7: 13542.

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.