BACKGROUND

CacyBP (caldesmin-binding protein, SIAH-interacting protein) is a 228 amino acid protein encoded by the human gene CACYBP. CacyBP is primarily a nuclear protein that contains one CS domain and one SGS domain. CacyBP is believed to be involved in calcium-dependent ubiquitination and subsequent proteosomal degradation of target proteins. It most likely serves as a molecular bridge in ubiquitin E3 complexes. It also participates in the ubiquitin-mediated degradation of β-catenin. CacyBP is thought to be a potential inhibitor of cell growth and invasion in the gastric cancer cell through its effects on β-catenin protein expression and transcriptional activation of TCF/LEF.

REFERENCES

4. Herington, J.L., et al. 2007. CacyBP expression in HeLa (human origin) and Hep G2 (mouse origin). Detection reagent used: m-IgG κ light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CHROMOSOMAL LOCATION

Genetic locus: CACYBP (human) mapping to 1q25.1; Cacybp (mouse) mapping to 1 H2.1.

SOURCE

CacyBP (H-1) is a mouse monoclonal antibody raised against amino acids 1-228 representing full length CacyBP of human origin.

PRODUCT

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

CacyBP (H-1) is available conjugated to agarose (sc-166455 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166455 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycocerythrin (sc-166455 PE), fluorescein (sc-166455 FITC), Alexa Fluor® 488 (sc-166455 AF488), Alexa Fluor® 546 (sc-166455 AF546), Alexa Fluor® 594 (sc-166455 AF594) or Alexa Fluor® 647 (sc-166455 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® B80 (sc-166455 A8080) or Alexa Fluor® 790 (sc-166455 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CacyBP (H-1) is recommended for detection of CacyBP 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).

CONCENTRATION


Molecular Weight of CacyBP: 26 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. 2) Immunoprecipitation: use ProteinA/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Data

CacyBP (H-1): sc-166455. Western blot analysis of CacyBP expression in HeLa (A), COLO 205 (B), MCF7 (C), A-431 (D), Jurkat (E) and Hep G2 (F) whole cell lysates. Detection reagent used: m-IgG κ light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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.