Cell cycle progression is controlled in part by a family of cyclin proteins and cyclin-dependent kinases (Cdks). Cdk proteins work in concert with cyclins to phosphorylate key substrates involved in cell cycle progression. Another family of proteins, Cdk inhibitors, also play a role in regulating the cell cycle by binding to cyclin-Cdk complexes and modulating their activity. Members of the Cdk family include Cdk2-Cdk8, PCTAIRE-1 and PITSIRE. PCTAIRE-1, PCTAIRE-2 and PCTAIRE-3 comprise a subfamily of Cdc2-related serine/threonine kinases. PCTAIRE-1, which is expressed primarily in mammalian brain, interacts with a variety of proteins, and is thought to be part of a multiple signal transduction cascade. PCTAIRE-2, also with expression in brain, may be important in terminally differentiated neurons. The human PCTAIRE-3 gene maps to chromosome 1q32.1.

Genetic locus: CDK18 (human) mapping to 1q32.1; Cdk18 (mouse) mapping to 1q32.2. CHROMOSOMAL LOCATION

APPLICATIONS

PCTAIRE-3 (H-4) is recommended for detection of PCTAIRE-3 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 PCTAIRE-3 siRNA (h): sc-37588, PCTAIRE-3 siRNA (m): sc-37589, PCTAIRE-3 shRNA Plasmid (h): sc-37588-SH, PCTAIRE-3 shRNA Plasmid (m): sc-37589-SH, PCTAIRE-3 shRNA (h) Lentiviral Particles: sc-37588-V and PCTAIRE-3 shRNA (m) Lentiviral Particles: sc-37589-V.

Molecular Weight of PCTAIRE-3: 54 kDa.

Source: IgG kappa light chain in 1.0 ml of PBS with <0.01% sodium azide and 0.1% gelatin.

PRODUCT

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

PCTAIRE-3 (H-4) is available conjugated to agaroase (sc-393262 AC), 500 µg/0.25 ml agaroase in 1 ml, for IP; to HRP (sc-393262 HRP), 200 µg/ml, for WB, (HCP) and ELISA; to either phycocerythrin (sc-393262 PE), fluorescein (sc-393262 FITC), Alexa Fluor® 488 (sc-393262 AF488), Alexa Fluor® 546 (sc-393262 AF546), Alexa Fluor® 594 (sc-393262 AF594) or Alexa Fluor® 647 (sc-393262 AF647), 200 µg/ml, for WB (RGB), IF, IHCIP and FCM; and to either Alexa Fluor® 680 (sc-393262 AF680) or Alexa Fluor® 790 (sc-393262 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.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG HRP: sc-516102 or m-IgG 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-24941 or rat liver extract: sc-24982. 3) Immunofluorescence: use m-IgG HRP-BP-FITC: sc-516140 or m-IgG 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-IgG BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistochemical Staining: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA

APPLICATIONS

REFERENCES


SELECT PRODUCT CITATIONS


RESEARCH USE

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