

PFTAIRE-1 (H-140): sc-50475

BACKGROUND

In vertebrates, as in yeast, multiple cyclins have been identified, including a total of eight such regulatory proteins in mammals. In contrast to the situation in yeast, the Cdc2 p34 kinase is not the only catalytic subunit identified in vertebrates that can interact with cyclins. Several additional Cdc2 p34-related cyclin dependent kinases have been identified. These include Cdk3, Cdk4, Cdk5, Cdk6, Cdk7, Cdk8, PCTAIRE-1, PCTAIRE-2, PCTAIRE-3, PFTAIRE-1 and KKIALRE. PFTAIRE-1 demonstrates distribution in the cytoplasm of HeLa cells in spite of its two N-terminal nuclear localization sequences.

REFERENCES

- Lazzaro, M.A., et al. 1997. Chromosomal mapping of the PFTAIRE gene, Pftk1, a Cdc2-related kinase expressed predominantly in the mouse nervous system. *Genomics* 42: 536-537.
- Lazzaro, M.A., et al. 1997. A novel Cdc2-related protein kinase expressed in the nervous system. *J. Neurochem.* 69: 348-364.

CHROMOSOMAL LOCATION

Genetic locus: CDK14 (human) mapping to 7q21.13; Cdk14 (mouse) mapping to 5 A1.

SOURCE

PFTAIRE-1 (H-140) is a rabbit polyclonal antibody raised against amino acids 1-140 mapping at the N-terminus of PFTAIRE-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-50475 X, 200 µg/0.1 ml.

APPLICATIONS

PFTAIRE-1 (H-140) is recommended for detection of PFTAIRE-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

PFTAIRE-1 (H-140) is also recommended for detection of PFTAIRE-1 in additional species, including canine, bovine and avian.

Suitable for use as control antibody for PFTAIRE-1 siRNA (h): sc-62779, PFTAIRE-1 siRNA (m): sc-62780, PFTAIRE-1 shRNA Plasmid (h): sc-62779-SH, PFTAIRE-1 shRNA Plasmid (m): sc-62780-SH, PFTAIRE-1 shRNA (h) Lentiviral Particles: sc-62779-V and PFTAIRE-1 shRNA (m) Lentiviral Particles: sc-62780-V.

PFTAIRE-1 (H-140) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

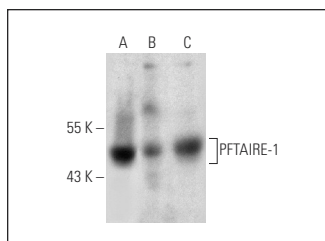
Molecular Weight of PFTAIRE-1: 50 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812, mouse brain extract: sc-2253 or mouse cerebellum extract: sc-2403.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PFTAIRE-1 (H-140): sc-50475. Western blot analysis of PFTAIRE-1 expression in SH-SY5Y whole cell lysate (A) and mouse brain (B) and mouse cerebellum (C) tissue extracts.

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 or our catalog for detailed protocols and support products.



Try **PFTAIRE-1 (C-3): sc-376366**, our highly recommended monoclonal alternative to PFTAIRE-1 (H-140).