**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 KKAIRE. PFTAIRE-1 demonstrates distribution in the cytoplasm of HeLa cells in spite of its two N-terminal nuclear localization sequences.

**REFERENCES**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

PFTAIRE-1 (C-3) is a mouse monoclonal 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 kappa light chain 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-376366 X, 200 µg/0.1 ml.

**STORAGE**

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

**APPLICATIONS**

PFTAIRE-1 (C-3) is recommended for detection of PFTAIRE-1 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) (start ing 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 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 (C-3) X TransCruz antibody is recommended for Gel Supershift and ChiP applications.

Molecular Weight of PFTAIRE-1: 50 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HL-60 whole cell lysate: sc-2209 or Jurkat whole cell lysate: sc-2204.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

**DATA**

PFTAIRE-1 (C-3): sc-376366. Western blot analysis of PFTAIRE-1 expression in Hep G2 (A), HL-60 (B) and Jurkat (C) whole cell lysates.

PFTAIRE-1 (C-3): sc-376366. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells (A). Immunofluorescence staining of formalin-fixed A-431 cells showing cytoplasmic vesicles localization (B).

**RESEARCH USE**

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