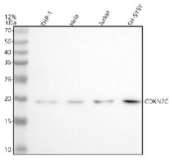
CDKN2C Antibody / Cyclin-dependent kinase inhibitor 2C (FY12809)

Catalog No.	Formulation	Size
FY12809	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	P42773
Applications	Western Blot : 0.25-0.5ug/ml
Limitations	This CDKN2C antibody is available for research use only.



Western blot analysis of CDKN2C using anti-CDKN2C antibody. Lane 1: human THP-1 whole cell lysates, Lane 2: human Hela whole cell lysates, Lane 3: human Jurkat whole cell lysates, Lane 4: human SH-SY5Y whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CDKN2C antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. A specific band was detected for CDKN2C at approximately 18 kDa. The expected molecular weight of CDKN2C is ~18 kDa.

Description

CDKN2C antibody detects Cyclin-dependent kinase inhibitor 2C, a member of the INK4 family of tumor suppressors that regulate cell cycle progression. Encoded by the CDKN2C gene on chromosome 1p32.3, this protein inhibits cyclin-dependent kinases CDK4 and CDK6, preventing phosphorylation of the retinoblastoma (RB) protein and blocking the G1-to-S phase transition. By enforcing this checkpoint, CDKN2C maintains proper cell cycle control and prevents

uncontrolled proliferation in both normal and cancerous tissues.

CDKN2C, also known as p18INK4C, is composed of ankyrin repeat domains that mediate specific binding to CDKs, thereby blocking their interaction with D-type cyclins. Through this inhibition, CDKN2C contributes to cell differentiation, growth arrest, and senescence. It is particularly active in hematopoietic, endocrine, and neural cells, where it coordinates cell cycle exit during differentiation.

The CDKN2C antibody is widely used in cancer biology, cell cycle regulation, and molecular pathology research to study proliferation control, checkpoint activation, and tumor suppression. Western blot analysis identifies a 19 kilodalton band corresponding to CDKN2C, while immunohistochemistry demonstrates nuclear staining in differentiated and quiescent cells. This antibody enables examination of INK4-mediated CDK inhibition and its effects on proliferation and differentiation pathways.

Loss or downregulation of CDKN2C is associated with multiple cancers, including glioma, pituitary adenoma, and leukemia, often through deletion or promoter methylation. Conversely, overexpression can contribute to cell cycle arrest and growth suppression. The CDKN2C antibody provides a dependable tool for studying tumor suppressor networks and checkpoint control. NSJ Bioreagents offers this antibody validated for its applications, ensuring consistent results in studies of cell cycle and tumor regulation.

Application Notes

Optimal dilution of the CDKN2C antibody should be determined by the researcher.

Immunogen

A synthetic peptide corresponding to a sequencein the middle region of human CDKN2C was used as the immunogen for the CDKN2C antibody.

Storage

After reconstitution, the CDKN2C antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.