Cdk6 (H-230): sc-7181



The Power to Question

BACKGROUND

Cell cycle progression is controlled in part by a family of cyclin proteins and cyclin dependent kinases (Cdks). Cdk proteins work in concert with the cyclins to phosphorylate key substrates involved in each phase of cell cycle progression. Another family of proteins, Cdk inhibitors, also plays a role in regulating the cell cycle by binding to cyclin/Cdk complexes and modulating their activity. Several Cdk proteins have been identified, including Cdk2-Cdk8, PCTAIRE-1-3, PITALRE and PITSLRE. Cdk6 is known to associate with cyclins D1, D2 and D3 and to be involved with the G₁/S transition of the cell cycle. Multiple inhibitors of Cdk6 have been identified, including p18 and p19. These inhibitors bind to both free and complexed Cdk6, and they inhibit the activity of the cyclin D-bound Cdk6.

CHROMOSOMAL LOCATION

Genetic locus: CDK6 (human) mapping to 7q21.2; Cdk6 (mouse) mapping to 5 A1.

SOURCE

Cdk6 (H-230) is a rabbit polyclonal antibody raised against amino acids 1-230 mapping at the N-terminus of Cdk6 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Cdk6 (H-230) is recommended for detection of Cdk6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Cdk6 (H-230) is also recommended for detection of Cdk6 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for Cdk6 siRNA (h): sc-29264, Cdk6 siRNA (m): sc-35048, Cdk6 shRNA Plasmid (h): sc-29264-SH, Cdk6 shRNA Plasmid (m): sc-35048-SH, Cdk6 shRNA (h) Lentiviral Particles: sc-29264-V and Cdk6 shRNA (m) Lentiviral Particles: sc-35048-V.

Molecular Weight of Cdk6: 40 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Jurkat whole cell lysate: sc-2204 or Jurkat + PMA nuclear extract: sc-2133.

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.

SELECT PRODUCT CITATIONS

- 1. Belyavskyi, M., et al. 1998. The structural protein ODV-EC27 of *Autographa californica* nucleopolyhedrovirus is a multifunctional viral cyclin. Proc. Natl. Acad. Sci. USA 95: 11205-11210.
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Try Cdk6 (B-10): sc-7961 or Cdk6 (DCS-83): sc-53638, our highly recommended monoclonal aternatives to Cdk6 (H-230). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see Cdk6 (B-10): sc-7961.