

#2090 Store at -20°C

# CDK7 Antibody

✓ 100 µl  
(10 western blots)

Orders ■ 877-616-CELL (2355)  
orders@cellsignal.com  
Support ■ 877-678-TECH (8324)  
info@cellsignal.com  
Web ■ www.cellsignal.com

rev. 03/24/10

This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R, Mk	40 kDa	Rabbit**

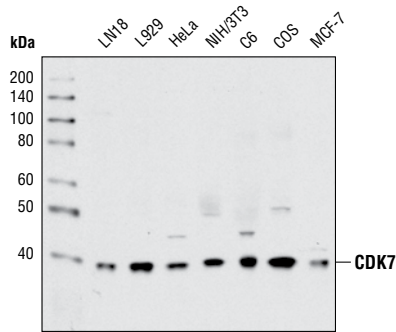
**Background:** CDK-activating kinase (CAK) is a complex of CDK7 and cyclin H. The complex is involved in cell cycle regulation by phosphorylating an activating residue in the T-loop domain of cdk's (1). Regulation of CAK activity is mediated by T-loop phosphorylation and by association with MAT1, both of which enhance its kinase activity toward the CTD of RNA polymerase II (2,3) and other substrates such as p53 (4). CAK is an essential component of the transcription complex TFIIF and may interact directly with TFIIF helicases (5).

**Specificity/Sensitivity:** CDK7 Antibody detects endogenous levels of total CDK7 protein.

**Source/Purification:** Polyclonal antibodies are produced by immunizing rabbits with a synthetic peptide corresponding to the amino terminus of human CDK7. Antibodies are purified using protein A and peptide affinity chromatography.

**Background References:**

- (1) Fisher, R.P. et al. (1994) *Cell* 78, 713–724.
- (2) Larochele, S. et al. (2001) *EMBO J.* 16, 3749–3759.
- (3) Yankulov, K.Y. et al. (1997) *EMBO J.* 16, 1638–1646.
- (4) Ko, L.J. et al. (1997) *Mol. Cell. Biol.* 17, 7220–7229.
- (5) Rossignol, M. et al. (1997) *EMBO J.* 16, 1628–1637.



Western blot analysis of extracts from various cell types using CDK7 Antibody.

Entrez-Gene ID #1022  
Swiss-Prot Acc. #P50613

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

\*Species cross-reactivity is determined by western blot.

\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

**Recommended Antibody Dilutions:**

Western blotting 1:1000

For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.

**IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.**

**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine  
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.