

#2090 Store at -20°C

CDK7 Antibody


Cell Signaling
TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M R Mk	Endogenous	40	Rabbit	#P50613	1022

Product Usage Information

Application

Western Blotting

Dilution

1:1000

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.

Specificity / Sensitivity

CDK7 Antibody detects endogenous levels of total CDK7 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the amino terminus of human CDK7. Antibodies are purified using protein A and peptide affinity chromatography.

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).

Background References

1. Fisher, R.P. et al. (1994) *Cell* 78, 713-724.
2. Larochelle, 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.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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

Applications Key

WB: Western Blotting

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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