

#4612 Store at -20C

# CTMP 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, IP	H M R	Endogenous	22, 26	Rabbit	#Q5T1C6	117145

## Product Usage Information

### Application

Western Blotting  
Immunoprecipitation

### Dilution

1:1000  
1:50

## 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

CTMP Antibody detects endogenous levels of total CTMP protein.

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues of human CTMP. Antibodies are purified by protein A and peptide affinity chromatography.

## Background

Carboxyl-terminal modulator protein (CTMP) is a negative regulator of Akt and was identified as an Akt binding protein. Akt, also referred to as PKB or Rac, plays a critical role in controlling the balance between survival and apoptosis (1-3). This protein kinase, activated by insulin and various growth and survival factors, functions in a wortmannin-sensitive pathway involving PI3 kinase (2,3). Akt is activated by phospholipid binding and activation loop phosphorylation at Thr308 by PDK1 (4), and by phosphorylation within the carboxy-terminus at Ser473. CTMP binds to the regulatory domain of Akt at the carboxy terminus of the protein and inhibits phosphorylation on Thr308 and Ser473 (5).

## Background References

1. Franke, T. F. et al. (1997) *Cell* 88, 435-437.
2. Burgering, B.M. and Coffey, P.J. (1995) *Nature* 376, 599-602.
3. Franke, T. F. et al. (1995) *Cell* 81, 727-736.
4. Alessi, D. R. et al. (1996) *EMBO J.* 15, 6541-6551.
5. Maira, S. M. et al. (2001) *Science* 294, 374-380.

## 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 **IP:** Immunoprecipitation

## 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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