

## Chk1 (N-term)

Rabbit Monoclonal Antibody | Product Data Sheet

Catalog# 1250-1

**Quantity:** 100ul

**Clone ID:** E250

**Species Cross-reactivity\*** + Human + Mouse + Rat

**Applications:** + WB - IHC + ICC + IP - FC

**Lot #:** Please refer to vial

**Molecular Wt.:** 54 kDa

**UniProt ID:** O14757

**Background:** Chk1 is involved in cell cycle arrest when DNA damage has occurred, and it plays an important role in DNA damage checkpoint, embryonic development and tumor suppression (1). Chk1 is activated in response to replication blocks and genotoxic stress, via phosphorylation of serines 317 and 345 (2). Activated Chk1 can bind to, phosphorylate (at serine 216) and inactivate cdc25c (3,4). Phosphorylation of cdc25c prevents activation of the CDC2-cyclin B complex and prevents entry into M-phase (3, 4).

**Specificity:** A synthetic peptide corresponding to N-terminal residues of human Chk1 was used as immunogen.

**Storage Condition and Buffer:** Store at -20 °C. Buffer: Antibody buffer, sodium azide, glycerol, and BSA. Stable for 12 months from date of receipt.

**Recommended Dilutions:**

**WB:** 1:1,000


**ICC:** 1:50

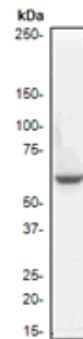
**IP:** 1:80

**Background References:**

1. Martinho, R.G., et al. Analysis of Rad3 and Chk1 protein kinases defines different checkpoint responses. *EMBO J.* 17: 7239-7249 (1998).
2. Zhao, H. and H. Piwnicka-Worms. ATR-mediated checkpoint pathways regulate phosphorylation and activation of human Chk1. *Mol. Cell. Biol.* 21: 4129-4139 (2001).
3. Zeng, Y., et al. Replication checkpoint requires phosphorylation of the phosphatase Cdc25 by Cds1 or Chk1. *Nature* 395: 507-510 (1998).
4. Sanchez, Y., et al. Conservation of the Chk1 checkpoint pathway in mammals: linkage of DNA damage to Cdk regulation through Cdc25. *Science* 277: 1497-501 (1997).

\*Cross reactivity determined by western blot only.

Product QC'd by: 



**Fig 1. A.** Western blot analysis on K562 cell lysate using anti-Chk1(N-term) RabMAb (catalog #1250-1), dilution 1:1,000.

**For research use only. Not for use in diagnostic or therapeutic applications.**

This product was manufactured under U.S. Patent No. 5,675,063. For a complete list of protocols and available related products, please visit [www.epitomics.com](http://www.epitomics.com)  
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