

RACO0464

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## Product Information

**Size:**

50ul

**Reactivity:**

Human

**Source:**

Homo sapiens (Human)

**Isotype:**

Rabbit IgG

**Applications:**

ELISA, WB, IHC, IF

**Recommended dilutions:**

WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200

**Protein Background:**

Serine/threonine-protein kinase which is required for checkpoint-mediated cell cycle arrest and activation of DNA repair in response to the presence of DNA damage or unreplicated DNA. May also negatively regulate cell cycle progression during unperturbed cell cycles. This regulation is achieved by a number of mechanisms that together help to preserve the integrity of the genome. Recognizes the substrate consensus sequence [R-X-X-S/T]. Binds to and phosphorylates CDC25A, CDC25B and CDC25C. Phosphorylation of CDC25A at 'Ser-178' and 'Thr-507' and phosphorylation of CDC25C at 'Ser-216' creates binding sites for 14-3-3 proteins which inhibit CDC25A and CDC25C.

**Gene ID:**

CHEK1

**Uniprot**

O14757

**Synonyms:**

Serine/threonine-protein kinase Chk1 (EC 2.7.11.1) (CHK1 checkpoint homolog) (Cell cycle checkpoint kinase) (Checkpoint kinase-1), CHEK1, CHK1

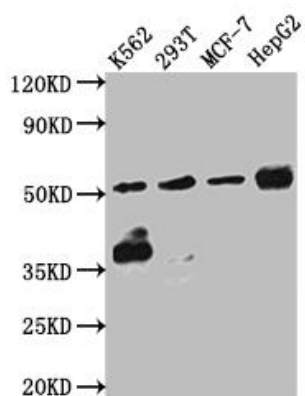
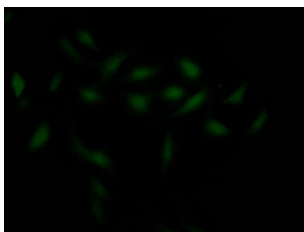
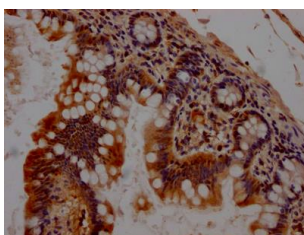
**Immunogen:**

A synthesized peptide derived from human Chk1.

**Storage:**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

## Product Images



IHC image of RACO0464 diluted at 1:100 and staining in paraffin-embedded human small intestine tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Immunofluorescence staining of HeLa Cells with RACO0464 at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

### Western Blot

Positive WB detected in( K562 whole cell lysate) 293T whole cell lysate) MCF-7 whole cell lysate) HepG2 whole cell lysate) All lanes: Chk1 antibody at 1:1000

### Secondary

Goat polyclonal to rabbit IgG at 1:50000 dilution

Predicted band size: 55, 44, 51 kDa

Observed band size: 55 kDa