Datasheet for ABIN968596

anti-CHEK2 antibody (AA 31-234)

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Overview

Quantity:	50 µg
Target:	CHEK2
Binding Specificity:	AA 31-234
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CHEK2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Mouse Chk2 aa. 31-234
Clone:	19-Chk2
Isotype:	IgG1
Cross-Reactivity:	Human, Rat (Rattus)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

	chromatography.

Target Details

Target:	CHEK2
Alternative Name:	Chk2 (CHEK2 Products)
Background:	The cell cycle is regulated by multiple checkpoints that determine cell fate. Such checkpoints ensure that DNA replication and chromosomal segregation are completed with high fidelity. When DNA is damaged, specific kinases and phosphatases, key components of cell cycle checkpoints, function to arrest the cell cycle and provide the necessary time for DNA repair. For example, DNA damage induces arrest of the cell cycle at the G2 checkpoint via Wee1-mediated inhibitory phosphorylation of the kinase Cdc2. Inhibition is relieved by the Cdc25C phosphatase via Cdc2 dephosphorylation. In turn, the Chk1 and Chk2 protein kinases phosphorylate and inhibit Cdc25C, thus preventing activation of the Cdc2-cyclin B complex and entry into mitosis. Chk2, the human homolog of S. cerevisiae Rad53 and S. pombe Cds1, contains a C-terminal kinase domain, an N-terminal regulatory region that is rich in TQ and SQ pairs, and a forked head-associated domain (FHA) which is found in other cell cycle kinases. Chk2 is expressed during late G1 to M phase and is found in the nucleoplasm. Thus, Chk1 and Chk2 activity may be an important checkpoint that inhibits entry into mitosis in response to DNA damage. This antibody is routinely tested by western blot analysis.
Molecular Weight:	60 kDa
Pathways:	p53 Signaling, Apoptosis, Cell Division Cycle

Application Details

Comment:	Related Products: ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide

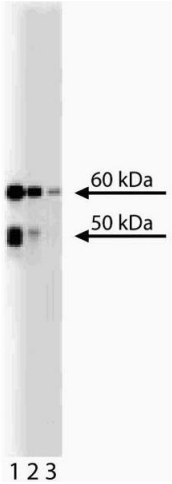
Handling

Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store undiluted at -20° C.

Publications

Product cited in:	Tominaga, Morisaki, Kaneko, Fujimoto, Tanaka, Ohtsubo, Hirai, Okayama, Ikeda, Nakanishi: " Role of human Cds1 (Chk2) kinase in DNA damage checkpoint and its regulation by p53." in: **The Journal of biological chemistry**, Vol. 274, Issue 44, pp. 31463-7, (1999) (PubMed).

Images



Western Blotting

Image 1. Western blot anakysis of Chk2 on RSV-3T3 lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of anti-Chk2.