



Product Information Sheet

Polyclonal Anti-CHK2 Checkpoint homolog, **CHK2** (Magnetic Bead Conjugate)

Catalogue No. PA1202-M

Immunogen

Lot No. 08L01

A synthetic peptide corresponding to a sequence at the C-terminal of human CHK2, different to the related rat sequence by a single amino acid.

Ig type: rabbit IgG1

Purification

Size: 100µg/Vial

Immunogen affinity purified

Specificity

Human, mouse, rat.

No cross reactivity with other proteins.

Contents

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN₃.

Storage

Store at 4°C for frequent use.

Recommended application

Immunoprecipitation(IP)

Description:

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic

BACKGROUND

CHK2, a protein kinase that is activated in response to DNA damage, is involved in cell cycle arrest. Mapped on 22q12.1, CHK2 has a potential regulatory region rich in SQ and TQ amino acid pairs. It regulates BRCA1 function after DNA damage by phosphorylating serine-988 of BRCA1¹. Additionally, CHK2 can be modified by phosphorylation and activated in response to ionizing radiation, and can be also modified in response to hydroxyurea treatment². Furthermore, oligomerization of CHEK2 increases the efficiency of transautophosphorylation, resulting in the release of active CHEK2 monomers that proceed to enforce checkpoint control in irradiated cells³. Moreover, CHK2 is a tumor suppressor gene conferring predisposition to sarcoma, breast cancer, and brain tumors, and that their observations provided a link between the central role of p53 inactivation in human cancer and the well-defined G2 checkpoint in yeast⁴. There is a wide expression of small amounts of CHK2 mRNA with larger amounts in human testis, spleen, colon, and peripheral blood leukocytes.

REFERENCE

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3. Ahn, J.-Y.; Li, X.; Davis, H. L.; Canman, C. E. : Phosphorylation of threonine 68 promotes oligomerization and autophosphorylation of the Chk2 protein kinase via the forkhead-associated domain. *J. Biol. Chem.* 277: 19389-19395, 2002.
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