Human Chk1 Antibody

Monoclonal Mouse IgG_{2B} Clone # 251903

Catalog Number: MAB1630

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Chk1.
Source	Monoclonal Mouse IgG_{2B} Clone # 251903
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human Chk1 Tyr157-Thr476 Accession # O14757
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

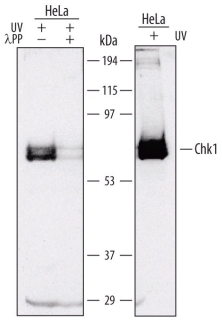
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Immunoprecipitation	2.5 µg/500 µg cell lysate	See Below

DATA

Immunoprecipitation



Immunoprecipitation of Human Chk1.
HeLa human cervical epithelial carcinoma cell line was untreated (-) or exposed (+) to 50 J/m^2 UV light for 1 hour. Chk1 was immunoprecipitated from 500 µg of cell lysate following incubation with 2.5 µg Mouse Anti-Human Chk1 Monoclonal Antibody (Catalog # MAB1630) for 1 hour on ice. Chk1-antibody complexes were absorbed using goat anti-mouse agarose (Sigma). Immunoprecipitated Chk1 (left panel) was detected by Western blot using 1 µg/mL Human/Mouse/Rat Phospho-Chk1 (S317) Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2054). The phospho-specificity of this antibody was supported by decreased labeling following treatment with 600 U λ-phosphatase (λ-PPase) for 1 hour. For additional reference, Western blot (right panel) shows lysates of HeLa cell line probed with 1 µg/mL Human/Mouse/Rat Phospho-Chk1 (S317) Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2054). View our recommended buffer recipes for immunoprecipitation.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The Chk1 checkpoint kinase is an integral member of a signaling cascade that controls cell cycle progression. In response to genotoxic stress, Chk1 is phosphorylated by ATM or ATM-related kinases. In turn, Chk1 phosphorylates downstream effectors, such as p53 or the Cdc25 phosphatases to halt cell cycle progression and allow time for repair of incurred damage.