

Product datasheet for **AM11058SU-N**

Chk1 (CHEK1) Mouse Monoclonal Antibody [Clone ID: 2G1D5]

Product data:

Product Type:	Primary Antibodies
Clone Name:	2G1D5
Applications:	WB
Recommended Dilution:	ELISA: 1/10,000. Western blotting: 1/1,000-1/4,000.
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Immunogen:	This monoclonal antibody is generated from mice immunized with Ni-NTA purified recombinant protein CHK1 expressed in E. Coli strain M15.
Specificity:	This antibody is specific to ChK1.
Formulation:	PBS containing 0.09% (W/V) Sodium Azide as preservative. State: Purified State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Protein G Chromatography eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	checkpoint kinase 1
Database Link:	Entrez Gene 1111 Human O14757



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Background:

Checkpoint pathways control the order and timing of cell cycle transitions and ensure that critical events, such as DNA replication and chromosome segregation, are completed with high fidelity. The protein exhibits altered mobility in immunoblotting when isolated from cells treated with ionizing radiation (IR), indicating that CHK1 is modified in response to DNA damage. In vitro, CHK1 directly phosphorylates a regulator of CDC2 tyrosine phosphorylation, CDC25C. Evidence indicates that in response to DNA damage, CHK1 phosphorylates and inhibits CDC25C, thus preventing activation of the CDC2-cyclin B complex and mitotic entry. Proteolysis of activated CHK1 may promote checkpoint termination under normal conditions and may play a role in the cytotoxic effects of camptothecin and related anticancer drugs.

Synonyms:

CHEK1, CHEK-1

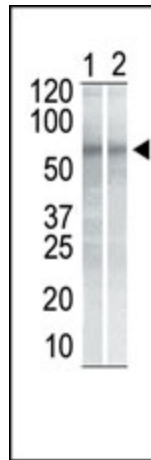
Product images:

Figure 1. Western blot analysis of anti-CHK1 Mab to detect CHK1 in NIH/3T3 cell lysate (Lane 1) and K562 cell lysate (Lane 2).