

Datasheet for ABIN2713979

CHEK2 Protein (Transcript Variant 1) (Myc-DYKDDDDK Tag)[Go to Product page](#)**2** Images

Overview

Quantity:	20 µg
Target:	CHEK2
Protein Characteristics:	Transcript Variant 1
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CHEK2 protein is labelled with Myc-DYKDDDDK Tag.
Application:	Functional Studies (Func), Antibody Production (AbP), Protein Interaction (PI), Standard (STD)

Product Details

Specificity:	Optimal preservation of protein structure, post-translational modifications and functions.
Characteristics:	<ul style="list-style-type: none">• Recombinant human CHK2 (transcript variant 1) protein expressed in HEK293 cells.• Produced with end-sequenced ORF clone• Tested for bioactivity.
Purity:	> 80 % as determined by SDS-PAGE and Coomassie blue staining
Biological Activity Comment:	CHEK2 activity verified in a biochemical assay;CHEK2 activity verified in a biochemical assay:

Target Details

Target:	CHEK2
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Target Details

Alternative Name: Chk2 ([CHEK2 Products](#))

Background: In response to DNA damage and replication blocks, cell cycle progression is halted through the control of critical cell cycle regulators. The protein encoded by this gene is a cell cycle checkpoint regulator and putative tumor suppressor. It contains a forkhead-associated protein interaction domain essential for activation in response to DNA damage and is rapidly phosphorylated in response to replication blocks and DNA damage. When activated, the encoded protein is known to inhibit CDC25C phosphatase, preventing entry into mitosis, and has been shown to stabilize the tumor suppressor protein p53, leading to cell cycle arrest in G1. In addition, this protein interacts with and phosphorylates BRCA1, allowing BRCA1 to restore survival after DNA damage. Mutations in this gene have been linked with Li-Fraumeni syndrome, a highly penetrant familial cancer phenotype usually associated with inherited mutations in TP53. Also, mutations in this gene are thought to confer a predisposition to sarcomas, breast cancer, and brain tumors. This nuclear protein is a member of the CDS1 subfamily of serine/threonine protein kinases. Several transcript variants encoding different isoforms have been found for this gene.

Molecular Weight: 60.7 kDa

NCBI Accession: [NP_009125](#)

Pathways: [p53 Signaling](#), [Apoptosis](#), [Cell Division Cycle](#)

Application Details

Application Notes: Recombinant human proteins can be used for:
Native antigens for optimized antibody production
Positive controls in ELISA and other antibody assays
Protein-protein interaction
In vitro biochemical assays and cell-based functional assays

Comment: The tag is located at the C-terminal.

Restrictions: For Research Use only

Handling

Concentration: > 50 µg/mL

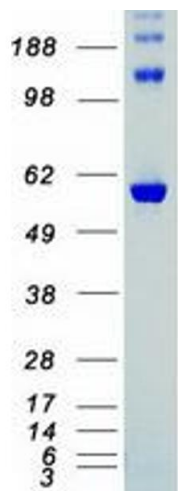
Buffer: 25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10 % glycerol.

Storage: -80 °C

Handling

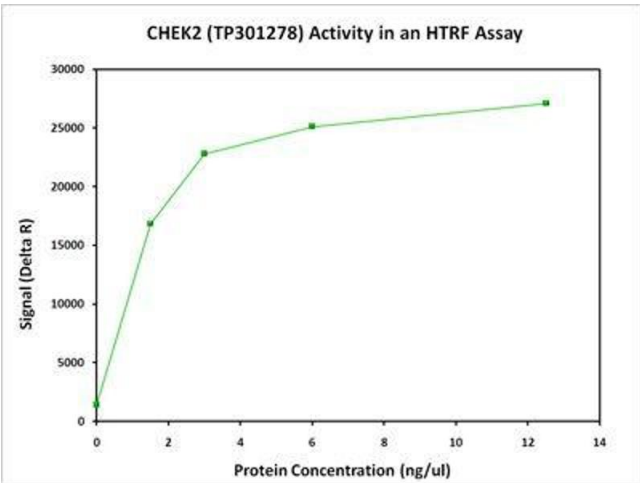
Storage Comment: Store at -80°C. Thaw on ice, aliquot to individual single-use tubes, and then re-freeze immediately. Only 2-3 freeze thaw cycles are recommended.

Images



Western Blotting

Image 1. Validation with Western Blot



Activity Assay

Image 2. Bioactivity measured with Activity Assay