Product Name: **KD-Validated Phospho-Chk1 (S280) Recombinant Rabbit Monoclonal Antibody**

Catalog #: **KVAb01299**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 54.4kDa

Antigen Information

Gene Name	CHEK1
Alternative Names	CHEK1; Checkpoint Kinase 1; CHK; Serine/Threonine-Protein Kinase Chk1; Cell Cycle Checkpoint Kinase; CHK1 Checkpoint Homolog; EC 2.7.11.1; Checkpoint, S. Pombe, Homolog Of, 1; CHK1 (Checkpoint, S.Pombe) Homolog; CHK1 Checkpoint Homolog (S. Pombe); Checkpoint Kinase-1; EC 2.7.11; OZEMA21; Chk1-S
Gene ID	1111.0
SwissProt ID	O14757
Immunogen	A synthesized peptide derived from human Phospho-Chk1 (S280)

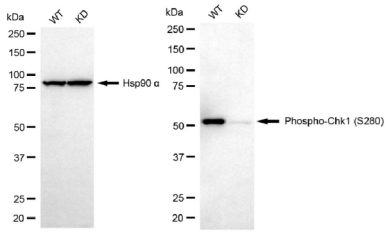
Background

The protein encoded by this gene belongs to the Ser/Thr protein kinase family. It is required for checkpoint mediated cell cycle arrest in response to DNA damage or the presence of unreplicated DNA. This protein acts to integrate signals from ATM and ATR, two cell cycle proteins involved in DNA damage responses, that also associate with chromatin in meiotic prophase I. Phosphorylation of CDC25A protein phosphatase by this protein is required for cells to delay cell cycle progression in response to double-strand DNA breaks. Several alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Oct 2011]

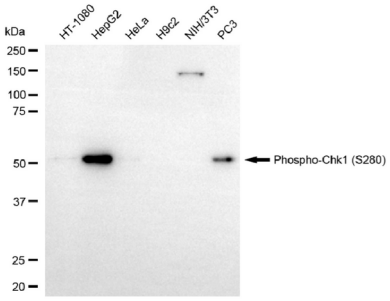
Research Area

Epigenetics and Nuclear Signaling,Cancer

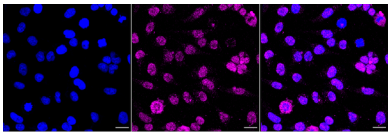
Image Data



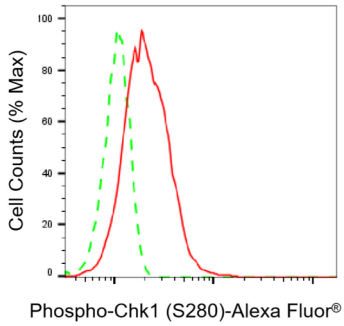
Western blotting analysis using phospho-Chk1 (S280) antibody (KVAb01299). Phospho-Chk1 (S280) expression in wild-type (WT) and CHEK1 knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with phospho-Chk1 (S280) antibody (KVAb01299, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using phospho-Chk1 (S280) antibody (KVAb01299). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with phospho-Chk1 (S280) antibody (KVAb01299, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells with Phospho-Chk1 (S280) antibody (KVAb01299, 1:1,000). Nuclei were stained blue with DAPI; Phospho-Chk1 (S280) was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar, 20 µm.



Flow cytometric analysis of Phospho-Chk1 (S280) expression in HeLa cells using Phospho-Chk1 (S280) antibody (KVAb01299, 1:2,000). Green, isotype control; red, Phospho-Chk1 (S280).