

Recombinant

DGRmAb®

**Chk2 (DGR12039) Rabbit mAb (PBS Only)**

db14513-PBS

Package : 10µg 100µg

**Product Name** : Chk2 (DGR12039) Rabbit mAb (PBS Only)**Cat.No.:** db14513-PBS**Synonyms** : CDS1; CHK2; LFS2; RAD53; hCds1; HuCds1; PP1425**Application** : WB, IHC-P, ICC/IF, FC, IP**Reactivity** : Human**Host species** : Rabbit**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. [provided by RefSeq, Apr 2012]

**Immunogen**

Recombinant protein of human Chk2

**Gene ID**

11200

**Swiss Prot**

O96017

**Synonyms**

CDS1; CHK2; LFS2; RAD53; hCds1; HuCds1; PP1425

**Reactivity**

Human

**Application**

WB, IHC-P, ICC/IF, FC, IP

**Calculated MW**

61 kDa

**Observed MW**

61 kDa

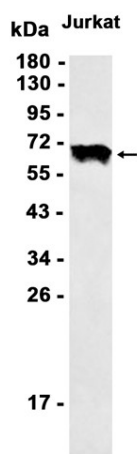
**Host species**

Rabbit

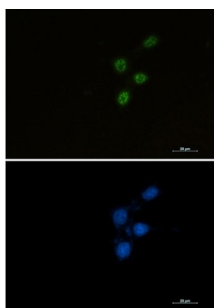
**Clonality**

Monoclonal

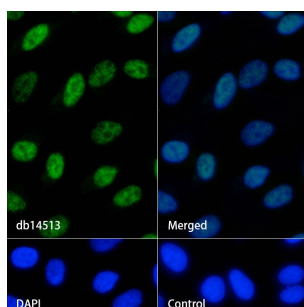
<b>Clonality No.</b>	DGR12039
<b>Isotype</b>	IgG
<b>Purity</b>	Affinity Purification
<b>Conjugation</b>	Un-conjugated
<b>Concentration</b>	1 mg/mL
<b>Formulation</b>	PBS Only
<b>Storage Stability</b>	Store at -20°C. Recommended to aliquot into single-use vials. Supplied in 1X PBS (pH 7.4). BSA and Azide Free. Stable for 12 months from date of receipt.



Western blot analysis of extracts from Jurkat cells using **db14513** at 1:1000.



Immunofluorescent analysis of HCT116 cells using **db14513** antibody (green), and DAPI (blue).



Immunofluorescence analysis of HeLa cells labelling Chk2 with **db14513**.

The cells were fixed with 4% PFA (10min, RT) followed by treatment with 0.1% Triton X-100 (10min, RT), and blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween 20 for 1h. The cells were then incubate with **db14513** (1:200) at room temperature for 1h, followed by a further incubation at room temperature for 45min with Goat Anti Rabbit IgG (H+L)-AF488 (**db10005**, shown in green). Nuclear DNA was labeled in blue with DAPI.

Control: Secondary antibody only.