Recombinant DGRmAb®

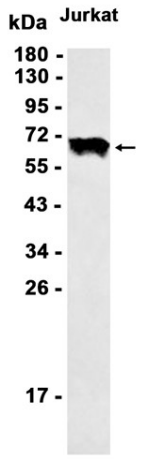
Chk2 (DGR12039) Rabbit mAb

db14513 **Package : 10μL 20μL 50μL 100μL**

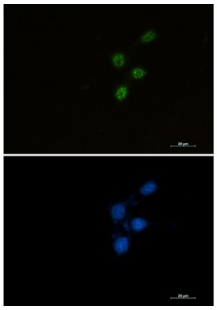
Product Name : Chk2 (DGR12039) Rabbit mAb
Cat.No.: db14513
Synonyms : CDS1; CHK2; LFS2; RAD53; hCds1; HuCds1; PP1425
Application : WB, IHC-P, ICC/IF, FC, IP
Reactivity : Human
Host species : Rabbit

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
Recommended dilution	WB: 1:1000 IHC-P: 1:200-1:2000 ICC/IF: 1:200-1:500 FC: 1:50-1:100 IP: 1:20-1:50

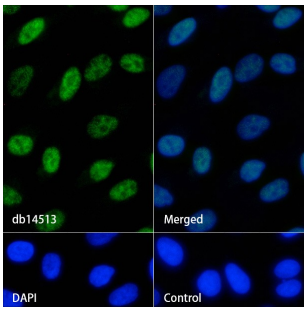
Calculated MW	61 kDa
Observed MW	61 kDa
Host species	Rabbit
Clonality	Monoclonal
Clonality No.	DGR12039
Isotype	IgG
Purity	Affinity Purification
Conjugation	Un-conjugated
Storage Stability	Store at -20°C. Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. 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 temprature 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.