Anti-Chk2 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R014538

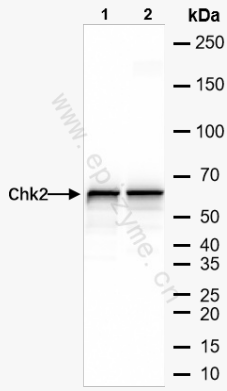
Product Information

Application	ELISA, WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC
Reactivity	Human
Dilution	WB 1:1,000~1:3,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	12I51L29
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Chk2
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Chk2 Rabbit mAb [12I51L29] is for research use only and not for use in diagnostic or therapeutic procedures.

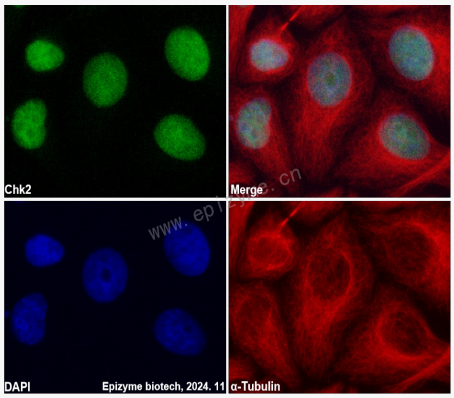
Protein Information

Synonyms	CDS 1, Cds1, Cds1 homolog, Checkpoint kinase 2, Checkpoint like protein CHK2, CHEK 2, Chek2, Chk 2, CHK2 checkpoint homolog (S. pombe), CHK2 checkpoint homolog, CHK2_HUMAN, hCds1, HuCds 1, LFS 2, LFS2, PP1425, RAD 53, RAD53, Rad53 homolog, Serine/threonine protein kinase Chk2, Serine/threonine-protein kinase Chk2.
Calculated MW	Calculated MW: 61 kDa; Observed MW: 61 kDa
Uniprot ID	O96017
Gene ID	11200
Background	These are known to be preferred sites for phosphorylation by ATM/ATR kinases. After DNA damage by ionizing radiation (IR), UV irradiation, or hydroxyurea treatment, Thr68 and other sites in this region become phosphorylated by ATM/ATR. The SQ/TQ cluster domain, therefore, seems to have a regulatory function.
Cellular Location	Nucleus; Nucleus. Isoform 10 is present throughout the cell and Nucleus > PML body. Nucleus > nucleoplasm. Recruited into PML bodies together with TP53.
Tissue Location	High expression is found in testis, spleen, colon and peripheral blood leukocytes. Low expression is found in other tissues.

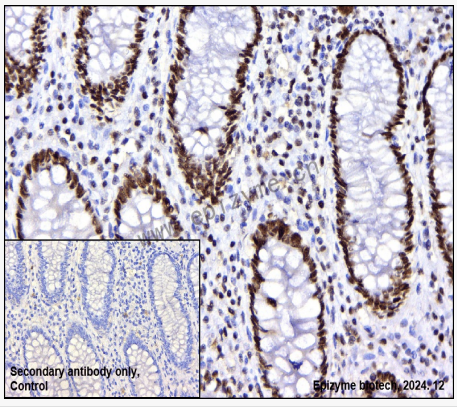
Validation Images



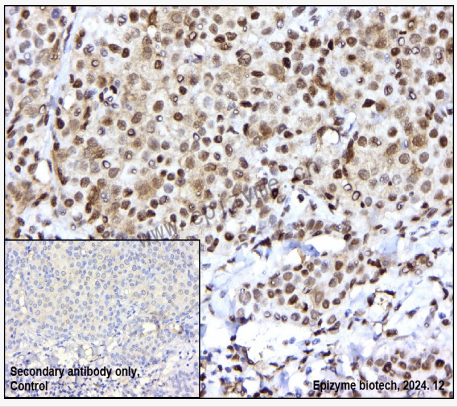
Western Blot - Anti-Chk2 Rabbit mAb [12I51L29]
All lanes: R014538 at 1:3,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: A431 (Human epidermoid teratoma cell line) whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 61 kDa
Observed band size: 61 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-Chk2 Rabbit mAb [12I51L29]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R014538 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-Chk2 Rabbit mAb [12I51L29]
Sample: Paraformaldehyde-fixed, paraffin embedded human colonic cancer tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014538 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-Chk2 Rabbit mAb [12I51L29]
Sample: Paraformaldehyde-fixed, paraffin embedded human breast cancer tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014538 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.