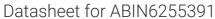
# antibodies - online.com







# anti-CHEK2 antibody (pSer516)



## **Images**



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Quantity:	100 μL
Target:	CHEK2
Binding Specificity:	pSer516
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CHEK2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC)

#### **Product Details**

Immunogen:	A synthesized peptide derived from human Chk2 around the phosphorylation site of Ser516.
Isotype:	IgG
Specificity:	Phospho-Chk2 (Ser516) Antibody detects endogenous levels of Chk2 only when phosphorylated at Serine 516.
Predicted Reactivity:	Pig,Bovine,Horse,Sheep,Dog
Purification:	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.

#### **Target Details**

Target:	CHEK2		
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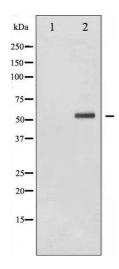
### **Target Details**

CHEK2 (CHEK2 Products)
Description: Serine/threonine-protein kinase which is required for checkpoint-mediated cell
cycle arrest, activation of DNA repair and apoptosis in response to the presence of DNA double
strand breaks. May also negatively regulate cell cycle progression during unperturbed cell
cycles. Following activation, phosphorylates numerous effectors preferentially at the
consensus sequence [L-X-R-X-X-S/T]. Regulates cell cycle checkpoint arrest through
phosphorylation of CDC25A, CDC25B and CDC25C, inhibiting their activity. Inhibition of CDC25
phosphatase activity leads to increased inhibitory tyrosine phosphorylation of CDK-cyclin
complexes and blocks cell cycle progression. May also phosphorylate NEK6 which is involved
in G2/M cell cycle arrest. Regulates DNA repair through phosphorylation of BRCA2, enhancing
the association of RAD51 with chromatin which promotes DNA repair by homologous
recombination. Also stimulates the transcription of genes involved in DNA repair (including
BRCA2) through the phosphorylation and activation of the transcription factor FOXM1.
Regulates apoptosis through the phosphorylation of p53/TP53, MDM4 and PML.
Phosphorylation of p53/TP53 at 'Ser-20' by CHEK2 may alleviate inhibition by MDM2, leading t
accumulation of active p53/TP53. Phosphorylation of MDM4 may also reduce degradation of
p53/TP53. Also controls the transcription of pro-apoptotic genes through phosphorylation of
the transcription factor E2F1. Tumor suppressor, it may also have a DNA damage-independent
function in mitotic spindle assembly by phosphorylating BRCA1. Its absence may be a cause of
the chromosomal instability observed in some cancer cells. Promotes the CCAR2-SIRT1
association and is required for CCAR2-mediated SIRT1 inhibition (PubMed:25361978).
Gene: CHEK2
62kDa
11200
096017
p53 Signaling, Apoptosis, Cell Division Cycle
WB 1:500-1:2000, IF/ICC 1:100-1:500, IHC 1:50-1:200, ELISA(peptide) 1:20000-1:40000
For Research Use only

#### Handling

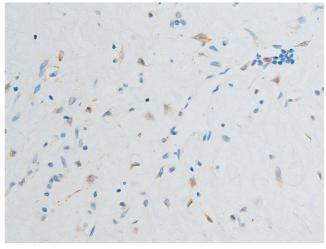
Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 $\%$ sodium azide and 50 $\%$ glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

#### **Images**



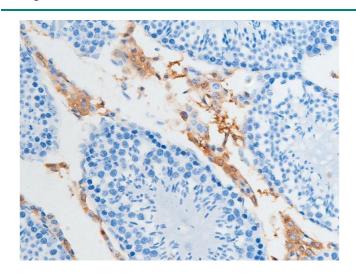
#### **Western Blotting**

**Image 1.** Western blot analysis of Chk2 phosphorylation expression in UV treated HeLa whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



#### **Immunohistochemistry**

**Image 2.** ABIN6267252 at 1/100 staining human glioma tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



#### **Immunohistochemistry**

**Image 3.** ABIN6267252 at 1/100 staining rat testicular tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

Please check the product details page for more images. Overall 7 images are available for ABIN6255391.