

Datasheet for ABIN3043811
anti-CHEK2 antibody (C-Term)



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2 Images

Overview

Quantity:	100 µg
Target:	CHEK2
Binding Specificity:	AA 465-498, C-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CHEK2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Purpose:	Anti-Chk2/CHEK2 Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence at the C-terminus of human Chk2, different from the related mouse sequence by four amino acids.
Sequence:	KLLVDPKAR FTTEEALRHP WLQDEDMKRK FQDL
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-Chk2/CHEK2 Antibody Picoband® (ABIN3043811). Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Details

Purification: Immunogen affinity purified.

Target Details

Target: CHEK2

Alternative Name: CHEK2 ([CHEK2 Products](#))

Background: Synonyms: Serine/threonine-protein kinase Chk2,2.7.11.1,CHK2 checkpoint homolog,Cds1 homolog,Hucds1,hCds1,Checkpoint kinase 2,CHEK2,CDS1, CHK2, RAD53,
Tissue Specificity: High expression is found in testis, spleen, colon and peripheral blood leukocytes. Low expression is found in other tissues.
Background: CHK2, a protein kinase that is activated in response to DNA damage, is involved in cell cycle arrest. Mapped on 22q12.1, CHK2 has a potential regulatory region rich in SQ and TQ amino acid pairs. It regulates BRCA1 function after DNA damage by phosphorylating serine-988 of BRCA1. Additionally, CHK2 can be modified by phosphorylation and activated in response to ionizing radiation, and can be also modified in response to hydroxyurea treatment. Furthermore, oligomerization of CHEK2 increases the efficiency of transautophosphorylation, resulting in the release of active CHEK2 monomers that proceed to enforce checkpoint control in irradiated cells. Moreover, CHK2 is a tumor suppressor gene conferring predisposition to sarcoma, breast cancer, and brain tumors, and that their observations provided a link between the central role of p53 inactivation in human cancer and the well-defined G2 checkpoint in yeast. There is a wide expression of small amounts of CHK2 mRNA with larger amounts in human testis, spleen, colon, and peripheral blood leukocytes.

Molecular Weight: 65 kDa

Gene ID: 11200

UniProt: [O96017](#)

Pathways: [p53 Signaling](#), [Apoptosis](#), [Cell Division Cycle](#)

Application Details

Application Notes: Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/mL, Human
Western blot, 0.1-0.5 µg/mL, Human, Mouse, Rat
1. Ahn, J.-Y., Li, X., Davis, H. L., Canman, C. E. : Phosphorylation of threonine 68 promotes oligomerization and autophosphorylation of the Chk2 protein kinase via the forkhead-associated domain. J. Biol. Chem. 277: 19389-19395, 2002. 2. Bell, D. W., Varley, J. M., Szydlo, T. E., Kang, D. H., Wahrer, D. C. R., Shannon, K. E., Lubratovich, M., Verselis, S. J., Isselbacher, K.

Application Details

J., Fraumeni, J. F., Birch, J. M., Li, F. P., Garber, J. E., Haber, D. A. : Heterozygous germ line hCHK2 mutations in Li-Fraumeni syndrome. Science 286: 2528-2531, 1999. 3. Brown, A. L., Lee, C.-H., Schwarz, J. K., Mitiku, N., Piwnica-Worms, H., Chung, J. H. : A human Cds1-related kinase that functions downstream of ATM protein in the cellular response to DNA damage. Proc. Nat. Acad. Sci. 96: 3745-3750, 1999. 4. Lee, J.-S., Collins, K. M., Brown, A. L., Lee, C.-H., Chung, J. H. : hCds1-mediated phosphorylation of BRCA1 regulates the DNA damage response. Nature 404: 201-204, 2000.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg Sodium azide.

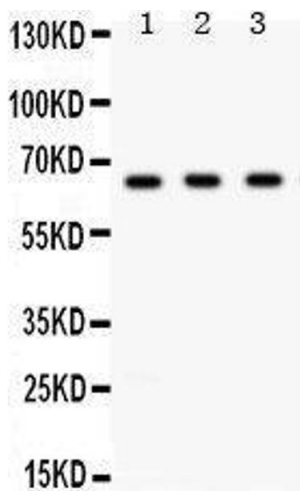
Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling Advice: Avoid repeated freezing and thawing.

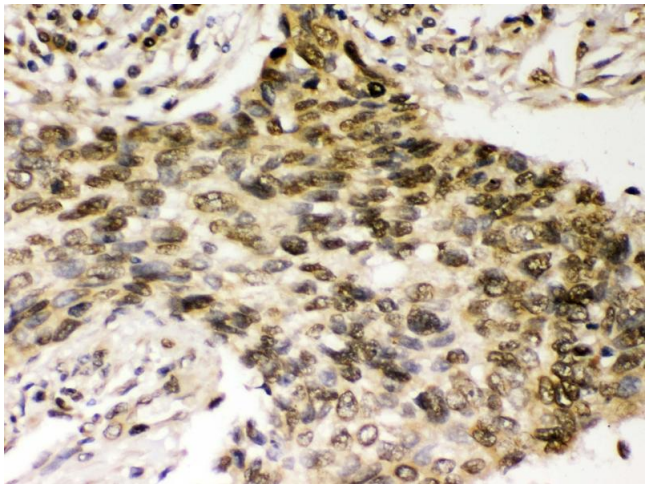
Storage: 4 °C, -20 °C

Storage Comment: Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.



Western Blotting

Image 1.



Immunohistochemistry (Paraffin-embedded Sections)

Image 2.