

## Product datasheet

# Anti-DNA PKCs antibody [18-2] (Biotin) ab79444

★★★★★ 1 Abreviews 1 References

### 製品の概要

製品名	Anti-DNA PKCs antibody [18-2] (Biotin)
製品の詳細	Mouse monoclonal [18-2] to DNA PKCs (Biotin)
標識	Biotin
アプリケーション	<b>適用あり:</b> ELISA, WB, IP, IHC-P, Inhibition Assay, ICC/IF
種交差性	<b>交差種:</b> Rat, Human
免疫原	Other Immunogen Type corresponding to Human DNA PKCs aa 1-2713. Human DNA dependent Protein Kinase purified from HeLa cells Database link: <a href="#">P78527</a>
エピトープ	Amino acids 1-2713
ポジティブ・コントロール	LS174T cells. Human tonsil tissue.

### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
バッファー	Preservative: 0.09% Sodium Azide Constituents: 0.2% BSA, 10mM PBS, pH 7.4
精製度	Protein G purified
特記事項(精製)	Purified from ascites fluid by Protein G chromatography.
ポリ/モノ	モノクローナル
クローン名	18-2
アイソタイプ	IgG1

### アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab79444** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリ ケーション	Abreviews	特記事項
ELISA	★★★★★	Use at an assay dependent concentration.
WB		Use a concentration of 1 - 2 µg/ml. Predicted molecular weight: 469 kDa.
IP		Use at 2 µg/mg of lysate.
IHC-P	1/50 - 1/100.	<b>Staining of formalin fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0 for 10-20 minutes followed by cooling at room temperature for 20 minutes.</b>
Inhibition Assay		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

## ターゲット情報

機能	<p>Serine/threonine-protein kinase that acts as a molecular sensor for DNA damage. Involved in DNA nonhomologous end joining (NHEJ) required for double-strand break (DSB) repair and V(D)J recombination. Must be bound to DNA to express its catalytic properties. Promotes processing of hairpin DNA structures in V(D)J recombination by activation of the hairpin endonuclease artemis (DCLRE1C). The assembly of the DNA-PK complex at DNA ends is also required for the NHEJ ligation step. Required to protect and align broken ends of DNA. May also act as a scaffold protein to aid the localization of DNA repair proteins to the site of damage. Found at the ends of chromosomes, suggesting a further role in the maintenance of telomeric stability and the prevention of chromosomal end fusion. Also involved in modulation of transcription. Recognizes the substrate consensus sequence [ST]-Q. Phosphorylates 'Ser-139' of histone variant H2AX/H2AFX, thereby regulating DNA damage response mechanism. Phosphorylates DCLRE1C, c-Abl/ABL1, histone H1, HSPCA, c-jun/JUN, p53/TP53, PARP1, POU2F1, DHX9, SRF, XRCC1, XRCC1, XRCC4, XRCC5, XRCC6, WRN, MYC and RFA2. Can phosphorylate C1D not only in the presence of linear DNA but also in the presence of supercoiled DNA. Ability to phosphorylate p53/TP53 in the presence of supercoiled DNA is dependent on C1D.</p>
配列類似性	<p>Belongs to the PI3/PI4-kinase family.            Contains 1 FAT domain.            Contains 1 FATC domain.            Contains 2 HEAT repeats.            Contains 1 PI3K/PI4K domain.            Contains 3 TPR repeats.</p>
翻訳後修飾	<p>Phosphorylated upon DNA damage, probably by ATM or ATR. Autophosphorylated on Thr-2609, Thr-2638 and Thr-2647. Thr-2609 is a DNA damage-inducible phosphorylation site (inducible with ionizing radiation, IR). Autophosphorylation induces a conformational change that leads to remodeling of the DNA-PK complex, requisite for efficient end processing and DNA repair. S-nitrosylated by GAPDH.</p>
細胞内局在	Nucleus.

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