

Datasheet for ABIN3042742
anti-CDK7 antibody (AA 31-346)



[Go to Product page](#)

2 Images

Overview

Quantity:	100 µg
Target:	CDK7
Binding Specificity:	AA 31-346
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CDK7 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	Anti-Cdk7 Antibody Picoband®
Immunogen:	E.coli-derived human Cdk7 recombinant protein (Position: D31-F346). Human Cdk7 shares 94.9% and 96.1% amino acid (aa) sequence identity with mouse and rat Cdk7, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-Cdk7 Antibody Picoband® (ABIN3042742). Tested in WB applications. This antibody reacts with Human. 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.
Purification:	Immunogen affinity purified.

Target Details

Target:	CDK7
Alternative Name:	CDK7 (CDK7 Products)
Background:	<p>Synonyms: Cyclin-dependent kinase 7,2.7.11.22,2.7.11.23,39 kDa protein kinase,p39 Mo15,CDK-activating kinase 1,Cell division protein kinase 7,Serine/threonine-protein kinase 1,TFIIH basal transcription factor complex kinase subunit,CDK7,CAK, CAK1, CDKN7, MO15, STK1,</p> <p>Tissue Specificity: Ubiquitous.</p> <p>Background: Cyclin-dependent kinase 7, also known as cell division protein kinase 7, is an enzyme that in humans is encoded by the CDK7 gene. The protein encoded by this gene is a member of the cyclin-dependent protein kinase (CDK) family. The gene was assigned to human chromosome 5q13.2. Serine/threonine kinase involved in cell cycle control and in RNA polymerase II-mediated RNA transcription. CDK7 is the catalytic subunit of the CDK-activating kinase (CAK) complex. It is required for DNA-bound peptides-mediated transcription and cellular growth inhibition.</p> <p>Sequence Similarities: Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily.</p>
Molecular Weight:	39 kDa
Gene ID:	1022
UniProt:	P50613
Pathways:	Cell Division Cycle , DNA Damage Repair , Intracellular Steroid Hormone Receptor Signaling Pathway , Mitotic G1-G1/S Phases , M Phase

Application Details

Application Notes:	<p>Western blot, 0.1-0.5 µg/mL, Human</p> <p>1. Chen, J., Larochelle, S., Li, X., Suter, B. Xpd/Ercc2 regulates CAK activity and mitotic progression. Nature 424: 228-232, 2003. 2. Larochelle, S., Merrick, K. A., Terret, M.-E., Wohlbald, L., Barboza, N. M., Zhang, C., Shokat, K. M., Jallepalli, P. V., Fisher, R. P. Requirements for Cdk7 in the assembly of Cdk1/cyclin B and activation of Cdk2 revealed by chemical genetics in human cells. Molec. Cell 25: 839-850, 2007. 3. Levedakou, E. N., He, M., Baptist, E. W., Craven, R. J., Cance, W. G., Welcsh, P. L., Simmons, A., Naylor, S. L., Leach, R. L., Lewis, T. B., Bowcock, A., Liu, E. T. Two novel human serine/threonine kinases with homologies to the cell cycle regulating Xenopus MO15, and NIMA kinases: cloning and characterization of their expression pattern. Oncogene 9: 1977-1988, 1994. 4. Shiekhattar, R., Mermelstein, F., Fisher, R. P., Drapkin, R., Dynlacht, B., Wessling, H. C., Morgan, D. O., Reinberg. Cdk-activating kinase complex is a</p>
--------------------	--

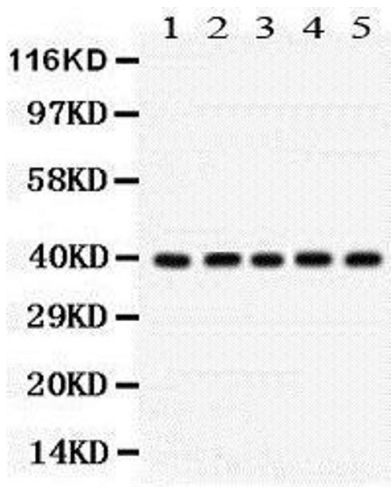
Application Details

	component of human transcription factor TFIIH. Nature 374: 283-287, 1995.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB.
Restrictions:	For Research Use only

Handling

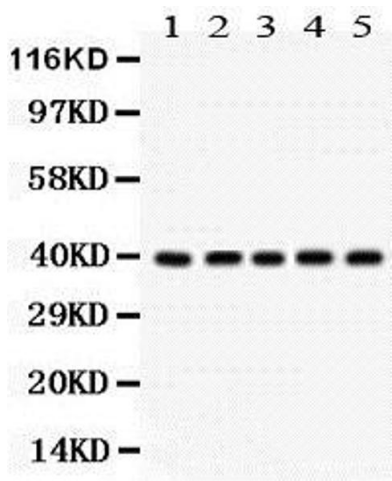
Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: 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.

Images



Western Blotting

Image 1.



Western Blotting

Image 2. Anti- Cdk7 Picoband antibody, Western blottingAll lanes: Anti Cdk7 at 0.5ug/ml Lane 1: MCF-7 Whole Cell Lysate at 40ug Lane 2: HELA Whole Cell Lysate at 40ug Lane 3: A549 Whole Cell Lysate at 40ug Lane 4: HEPG2 Whole Cell Lysate at 40ug Lane 5: 293T Whole Cell Lysate at 40ug Predicted bind size: 39KD Observed bind size: 39KD