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Datasheet for ABIN5693209
anti-CDC45 antibody (AA 166-431)

1 Image

Overview

Quantity:	100 µg
Target:	CDC45
Binding Specificity:	AA 166-431
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CDC45 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Brand:	Picoband™
Immunogen:	E. coli-derived human CDC45L recombinant protein (Position: E166-A431).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for CDC45L detection. Tested with WB, Direct ELISA in Human, Mouse, Rat.

Target Details

Target:	CDC45
Alternative Name:	CDC45 (CDC45 Products)
Background:	Synonyms: Cell division control protein 45 homolog, PORC-PI-1, CDC45, CDC45L, CDC45L2,

Target Details

UNQ374/PRO710

Tissue Specificity: Widely expressed, highest levels are found in adult testis and thymus and in fetal liver.

Background: CDC45 is a protein that in humans is encoded by the CDC45L gene. The protein encoded by this gene was identified by its strong similarity with *Saccharomyces cerevisiae* Cdc45, an essential protein required to the initiation of DNA replication. Cdc45 is a member of the highly conserved multiprotein complex including Cdc6/Cdc18, the minichromosome maintenance proteins (MCMs) and DNA polymerase, which is important for early steps of DNA replication in eukaryotes. This protein has been shown to interact with MCM7 and DNA polymerase alpha. Studies of the similar gene in *Xenopus* suggested that this protein play a pivotal role in the loading of DNA polymerase alpha onto chromatin. Alternate splicing results in multiple transcript variants.

UniProt: [O75419](#)

Pathways: [Mitotic G1-G1/S Phases](#), [DNA Replication](#), [Synthesis of DNA](#)

Application Details

Application Notes: Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot.

Application Details: Western blot, 0.1-0.5 µg/mL

Direct ELISA, 0.1-0.5 µg/mL

Restrictions: For Research Use only

Handling

Format: Lyophilized

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

Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg NaN₃.

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: 4 °C, -20 °C

Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.

It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing

and thawing.

Images

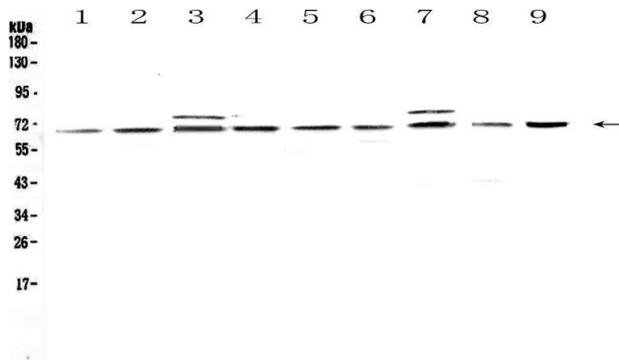
**Western Blotting**

Image 1. Western blot analysis of CDC45L using anti-CDC45L antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat testis tissue lysates, Lane 2: rat thymus tissue lysates, Lane 3: rat brain tissue lysates, Lane 4: rat lung tissue lysates, Lane 5: mouse testis tissue lysates, Lane 6: mouse thymus tissue lysates, Lane 7: mouse brain tissue lysates, Lane 8: mouse lung tissue lysates, Lane 9: mouse HEPA1-6 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CDC45L antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CDC45L at approximately 66KD. The expected band size for CDC45L is at 66KD.