

Anti-Cyclin E1/CCNE1 Antibody Picoband™ (monoclonal, 8B9C3)

Catalog # ABO16571

Product Information

Application	WB
Primary Accession	P24864
Host	Mouse
Isotype	Mouse IgG2b
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized
Description	Anti-Cyclin E1/CCNE1 Antibody Picoband™ (monoclonal, 8B9C3) . Tested in WB applications. This antibody reacts with Human.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.

Additional Information

Gene ID	898
Other Names	G1/S-specific cyclin-E1, CCNE1, CCNE
Calculated MW	47077
Application Details	Western blot, 0.25-0.5 µg/ml, Human
Source	Eukaryota
Contents	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
Clone Names Immunogen	Clone: 8B9C3 E.coli-derived human Cyclin E1/CCNE1 recombinant protein (Position: R3-A386).
Purification	Immunogen affinity purified.
Storage	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 freezing and thawing.

Protein Information

Name	CCNE1
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Synonyms	CCNE
Function	Essential for the control of the cell cycle at the G1/S (start) transition.
Cellular Location	Nucleus.
Tissue Location	Highly expressed in testis and placenta. Low levels in bronchial epithelial cells.

Background

G1/S-specific cyclin-E1 is a protein that in humans is encoded by the CCNE1 gene. It is mapped to 19q12. The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This cyclin forms a complex with and functions as a regulatory subunit of CDK2, whose activity is required for cell cycle G1/S transition. This protein accumulates at the G1-S phase boundary and is degraded as cells progress through S phase. Overexpression of this gene has been observed in many tumors, which results in chromosome instability, and thus may contribute to tumorigenesis. This protein was found to associate with, and be involved in, the phosphorylation of NPAT protein (nuclear protein mapped to the ATM locus), which participates in cell-cycle regulated histone gene expression and plays a critical role in promoting cell-cycle progression in the absence of pRB.

Images

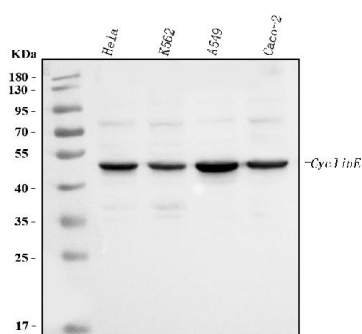


Figure 1. Western blot analysis of CCNE1 using anti-CCNE1 antibody (M00543-3).

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 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,
Lane 2: human K562 whole cell lysates,
Lane 3: human A549 whole cell lysates,
Lane 4: human CACO-2 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-CCNE1 antigen affinity purified monoclonal antibody (Catalog # M00543-3) 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-mouse 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 # EK1001) with Tanon 5200 system. A specific band was detected for CCNE1 at approximately 47 kDa. The expected band size for CCNE1 is at 47 kDa.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.