

Anti-CDK8 Rabbit Monoclonal Antibody

Catalog # ABO13450

Specification

Anti-CDK8 Rabbit Monoclonal Antibody - Product Information

Application WB, IF, ICC, IP **Primary Accession** P<u>49336</u> Rabbit Host Isotype **Rabbit IgG** Reactivity Rat, Human, Mouse Clonality Monoclonal Format Liquid Description Anti-CDK8 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

Anti-CDK8 Rabbit Monoclonal Antibody - Additional Information

Gene ID 1024

Other Names Cyclin-dependent kinase 8, 2.7.11.22, 2.7.11.23, Cell division protein kinase 8, Mediator complex subunit CDK8, Mediator of RNA polymerase II transcription subunit CDK8, Protein kinase K35, CDK8

Calculated MW 53284 MW KDa

Application Details WB 1:500-1:1000
ICC/IF 1:50-1:500
IP 1:50

Subcellular Localization Nucleus.

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human CDK8

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-CDK8 Rabbit Monoclonal Antibody - Protein Information



Name CDK8

Function

Component of the Mediator complex, a coactivator involved in regulated gene transcription of nearly all RNA polymerase II-dependent genes. Mediator functions as a bridge to convey information from gene- specific regulatory proteins to the basal RNA polymerase II transcription machinery. Mediator is recruited to promoters by direct interactions with regulatory proteins and serves as a scaffold for the assembly of a functional pre-initiation complex with RNA polymerase II and the general transcription factors. Phosphorylates the CTD (C- terminal domain) of the large subunit of RNA polymerase II (RNAp II), which may inhibit the formation of a transcription initiation complex. Phosphorylates CCNH leading to down-regulation of the TFIIH complex and transcriptional repression. Recruited through interaction with MAML1 to hyperphosphorylate the intracellular domain of NOTCH, leading to its degradation.

Cellular Location Nucleus.

Anti-CDK8 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-CDK8 Rabbit Monoclonal Antibody - Images



Figure 1. Western blot analysis of CDK8 using anti-CDK8 antibody (M01493).

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 293T whole cell lysates,



Lane 3: human K562 whole cell lysates,

Lane 4: human MOLT-4 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-CDK8 antigen affinity purified monoclonal antibody (Catalog # M01493) at 1:500 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 # EK1002) with Tanon 5200 system. A specific band was detected for CDK8 at approximately 60 kDa. The expected band size for CDK8 is at 53 kDa.



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.





Immunofluorescent analysis using the Antibody at 1:50 dilution.



Immunofluorescent analysis using the Antibody at 1:150 dilution.



Immunofluorescent analysis using the Antibody at 1:500 dilution.