

Anti-CDK8 Rabbit Monoclonal Antibody

Catalog # ABO13450

Product Information

Application	WB, IF, ICC, IP
Primary Accession	P49336
Host	Rabbit
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.

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
Application Details	WB 1:500-1:1000 ICC/IF 1:50-1:500 IP 1:50
Subcellular Localization	Nucleus.
Source	Eukaryota
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.
Clone Names	Clone: GHF-3
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.

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 (PubMed:[10993082](#)). Recruited through interaction with MAML1 to hyperphosphorylate the intracellular domain of NOTCH, leading to its degradation (PubMed:[15546612](#)). Selectively regulates the interferon response by phosphorylating the transcription factor STAT1 transactivation domain (By similarity).

Cellular Location

Nucleus.

Images

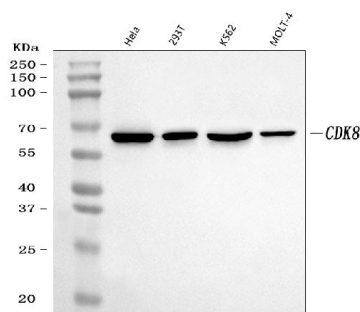


Figure 1. Western blot analysis of CDK8 using anti-CDK8 antibody (M01493).

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.

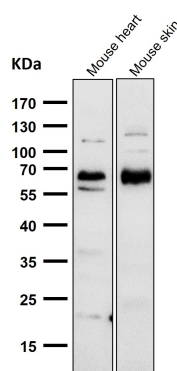
Lane 1: human HeLa whole cell lysates,

Lane 2: human 293T whole cell lysates,

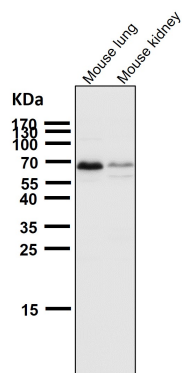
Lane 3: human K562 whole cell lysates,

Lane 4: human MOLT-4 whole cell lysates.

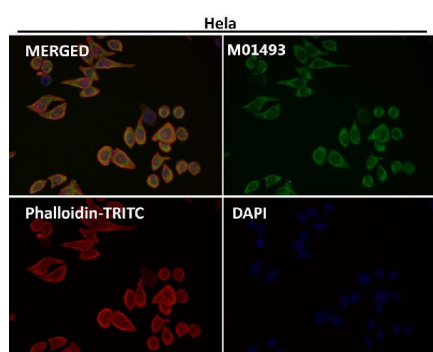
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-CDK8 antigen affinity purified monoclonal antibody (Catalog # M01493) at 1:500 overnight 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.



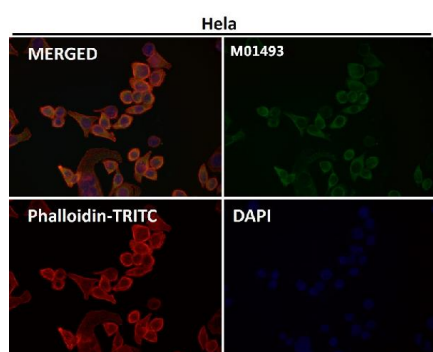
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



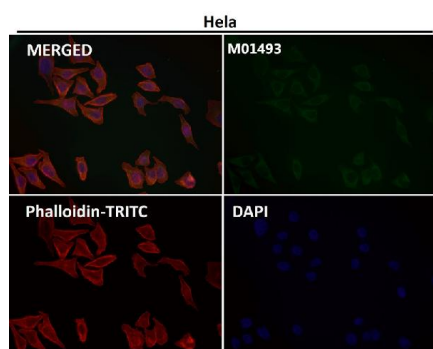
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



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.

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