

Product datasheet

Anti-Casein Kinase 1 alpha antibody [EPR19824] ab206652

KO VALIDATED Recombinant **RabMAb**

★★★★★ 2 Abreviews 2 References 6 Images

Overview

Product name	Anti-Casein Kinase 1 alpha antibody [EPR19824]
Description	Rabbit monoclonal [EPR19824] to Casein Kinase 1 alpha
Host species	Rabbit
Tested applications	Suitable for: IP, WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Casein Kinase 1 alpha aa 50-150. The exact sequence is proprietary. Database link: P48729
Positive control	WB: HEK-293T, HeLa, MCF7 and NIH/3T3 whole cell lysates; Human fetal brain, fetal kidney, fetal spleen and skin lysates; Mouse and rat brain, kidney, spleen and skin lysates. IP: Human skin lysate.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR19824
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab206652** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		1/30.
WB	★★★★★	1/1000. Detects a band of approximately 36 kDa (predicted molecular weight: 39 kDa).

Target

Function

Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. It can phosphorylate a large number of proteins. Participates in Wnt signaling. Phosphorylates CTNNB1 at 'Ser-45'. May play a role in segregating chromosomes during mitosis.

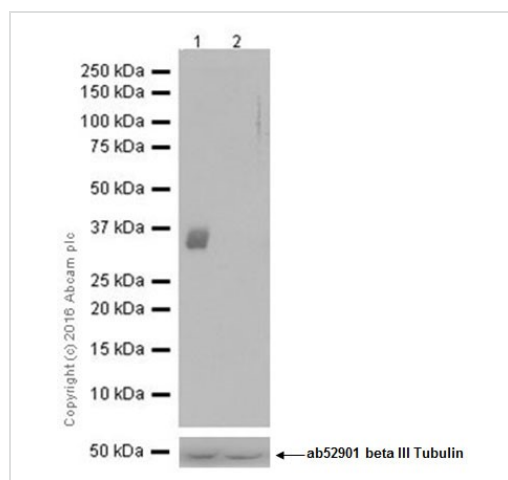
Sequence similarities

Belongs to the protein kinase superfamily. CK1 Ser/Thr protein kinase family. Casein kinase I subfamily.
Contains 1 protein kinase domain.

Cellular localization

Cytoplasm. Cytoplasm > cytoskeleton > centrosome. Chromosome > centromere > kinetochore. Nucleus speckle. Localizes to the centrosome in interphase cells, and to kinetochore fibers during mitosis.

Images



Western blot - Anti-Casein Kinase 1 alpha antibody [EPR19824] (ab206652)

All lanes : Anti-Casein Kinase 1 alpha antibody [EPR19824] (ab206652) at 1/1000 dilution

Lane 1 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Lane 2 : HEK-293T Casein Kinase 1 alpha KO whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

Predicted band size: 39 kDa

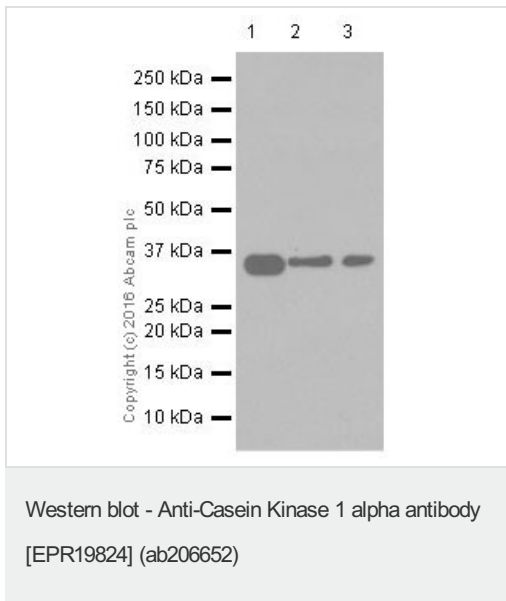
Observed band size: 36 kDa

[why is the actual band size different from the predicted?](#)

Exposure time: 1 second

Blocking/Dilution buffer: 5% NFDm/TBST.

The lysates were kindly provided by our collaborator Dr. Yi Rao, Peking University.



All lanes : Anti-Casein Kinase 1 alpha antibody [EPR19824] (ab206652) at 1/1000 dilution

Lane 1 : Human fetal brain lysate

Lane 2 : Human fetal kidney lysate

Lane 3 : Human fetal spleen lysate

Lysates/proteins at 20 µg per lane.

Secondary

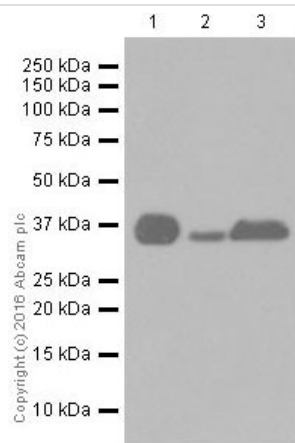
All lanes : VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/4000 dilution

Predicted band size: 39 kDa

Observed band size: 36 kDa [why is the actual band size different from the predicted?](#)

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-Casein Kinase 1 alpha antibody [EPR19824] (ab206652)

All lanes : Anti-Casein Kinase 1 alpha antibody [EPR19824] (ab206652) at 1/1000 dilution

Lane 1 : Mouse brain lysate

Lane 2 : Mouse kidney lysate

Lane 3 : Mouse spleen lysate

Lysates/proteins at 20 µg per lane.

Secondary

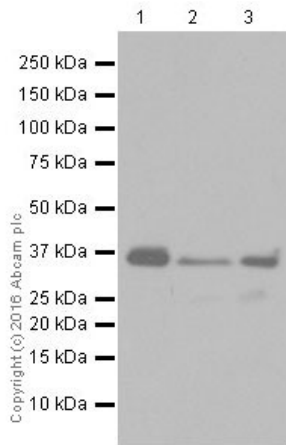
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

Predicted band size: 39 kDa

Observed band size: 36 kDa [why is the actual band size different from the predicted?](#)

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-Casein Kinase 1 alpha antibody [EPR19824] (ab206652)

All lanes : Anti-Casein Kinase 1 alpha antibody [EPR19824] (ab206652) at 1/1000 dilution

Lane 1 : Rat brain lysate

Lane 2 : Rat kidney lysate

Lane 3 : Rat spleen lysate

Lysates/proteins at 20 µg per lane.

Secondary

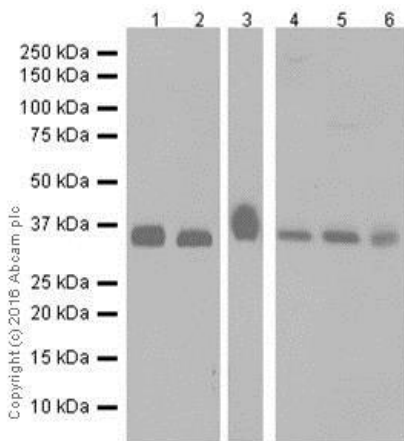
All lanes : Rabbit monoclonal [EPR19824] to Casein Kinase 1 alpha (ab206652) at 1/10000 dilution

Predicted band size: 39 kDa

Observed band size: 36 kDa [why is the actual band size different from the predicted?](#)

Exposure time: 5 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-Casein Kinase 1 alpha antibody [EPR19824] (ab206652)

All lanes : Anti-Casein Kinase 1 alpha antibody [EPR19824] (ab206652) at 1/1000 dilution

Lane 1 : Human skin lysate

Lane 2 : Mouse skin lysate

Lane 3 : Rat skin lysate

Lane 4 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 5 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lane 6 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

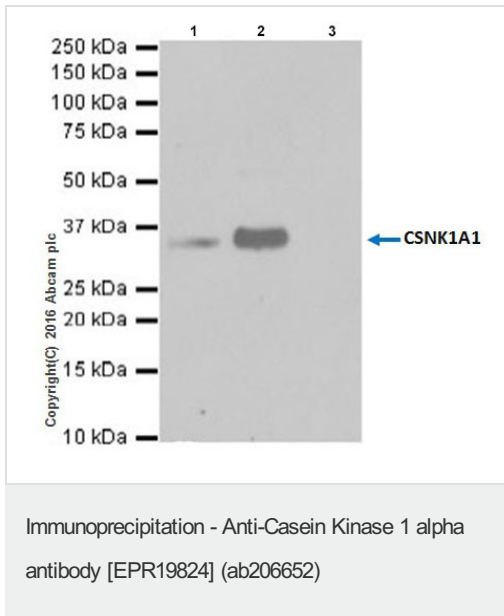
Predicted band size: 39 kDa

Observed band size: 36 kDa [why is the actual band size different](#)

from the predicted?

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1/2: 15 seconds; Lane 3: 3 min; Lane 4/5/6: 1 second.



Casein Kinase 1 alpha was immunoprecipitated from 0.35 mg of Human skin lysate with ab206652 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab206652 at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1000 dilution.

Lane 1: Human skin lysate, 10µg (Input).

Lane 2: ab206652 IP in Human skin lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab206652 in Human skin lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 10 seconds.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors