abcam

Product datasheet

Anti-Cyclin A1 + Cyclin A2 antibody [EPR18054] ab185619



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Overview

Product name Anti-Cyclin A1 + Cyclin A2 antibody [EPR18054]

Description Rabbit monoclonal [EPR18054] to Cyclin A1 + Cyclin A2

Host species Rabbit

Tested applications Suitable for: WB, IHC-P, IP

Species reactivity Reacts with: Human, Recombinant fragment

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Recombinant fragment of Human Cyclin A1 protein; Full length Human Cyclin A2

recombinant protein; Human testis lysate. HeLa and HepG2 whole cell lysate. IHC-P: Human

testis and colon cancer tissues. IP: K562 whole cell lysate.

General notesThis product is a recombinant monoclonal antibody, which offers several advantages including:

- 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 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

1

Clone number EPR18054

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab185619 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
WB		1/1000. Detects a band of approximately 52, 49 kDa (predicted molecular weight: 52, 49 kDa).
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/70.

Target

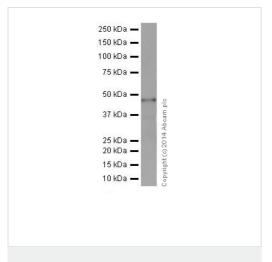
Relevance

Cyclin A1: Function: May be involved in the control of the cell cycle at the G1/S (start) and G2/M (mitosis) transitions. May primarily function in the control of the germline meiotic cell cycle and additionally in the control of mitotic cell cycle in some somatic cells. Tissue specificity: Very high levels in testis and very low levels in brain. Also found in myeloid Leukemia cell lines. Similarity: Belongs to the cyclin family. Cyclin AB subfamily. Developmental stage: Expression increases in early G1 phase and reaches highest levels during the S and G2/M phases. Cyclin A2: Function: Essential for the control of the cell cycle at the G1/S (start) and the G2/M (mitosis) transitions. Similarity: Belongs to the cyclin family. Cyclin AB subfamily. Developmental stage: Accumulates steadily during G2 and is abruptly destroyed at mitosis.

Cellular localization

Cytoplasmic and Nuclear

Images



Western blot - Anti-Cyclin A1 + Cyclin A2 antibody [EPR18054] (ab185619) Anti-Cyclin A1 + Cyclin A2 antibody [EPR18054] (ab185619) at 1/20000 dilution + Recombinant fragment of Human Cyclin A1 protein at 0.01 μg

Secondary

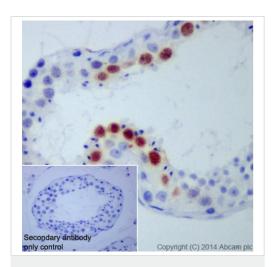
Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/1000 dilution

Predicted band size: 52, 49 kDa **Observed band size:** 47 kDa

Exposure time: 2 seconds

Recombinant fragment of Human Cyclin A1 protein contains aa261-450 with His-Tag & GST-tag.

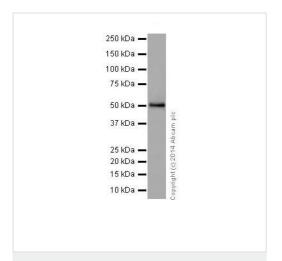
Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cyclin A1 + Cyclin A2 antibody [EPR18054] (ab185619)

Immunohistochemical analysis of paraffin-embedded human testis tissue labeling Cyclin A1 + Cyclin A2 using ab185619 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nuclear staining of spermatocytes of the human testis is observed. Counterstained with Hematoxylin. Negative control obtained using PBS instead of ab185619 and secondary antibody only.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-Cyclin A1 + Cyclin A2 antibody [EPR18054] (ab185619) Anti-Cyclin A1 + Cyclin A2 antibody [EPR18054] (ab185619) at 1/2000 dilution + Full length Human Cyclin A2 recombinant protein at 0.01 μg

Secondary

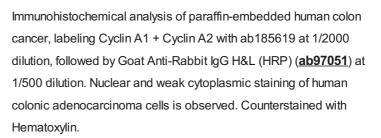
Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/1000 dilution

Predicted band size: 52, 49 kDa **Observed band size:** 50 kDa

Exposure time: 5 seconds

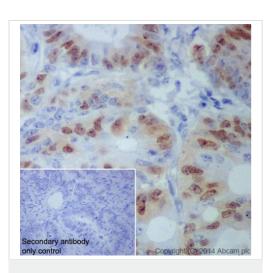
Recombinant full length Cyclin A2 protein contains aa1-432 with His-Tag.

Blocking/Dilution buffer: 5% NFDM/TBST.

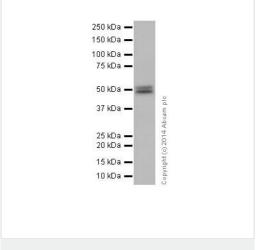


Negative control obtained using PBS instead of ab185619 and secondary antibody only.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cyclin A1 + Cyclin A2 antibody [EPR18054] (ab185619)



Western blot - Anti-Cyclin A1 + Cyclin A2 antibody [EPR18054] (ab185619)



Anti-Cyclin A1 + Cyclin A2 antibody [EPR18054] (ab185619) at 1/1000 dilution + Human testis lysate at 10 µg

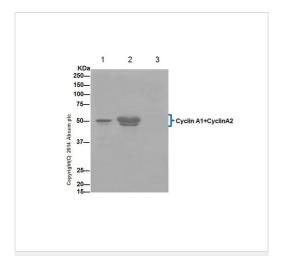
Secondary

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 52, 49 kDa Observed band size: 49,52 kDa

Exposure time: 1 minute

5% NFDM/TBST: Blocking and diluting buffer.



Immunoprecipitation - Anti-Cyclin A1 + Cyclin A2 antibody [EPR18054] (ab185619)

Cyclin A1 + Cyclin A2 was immunoprecipitated from 1mg of K562 (Human chronic myelogenous leukemia cells from bone marrow) whole cell extract with ab185619 at 1/70 dilution. Western blot was performed from the immunoprecipitate using ab185619 at 1/1000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of lgG, was used as secondary antibody at 1/1500 dilution.

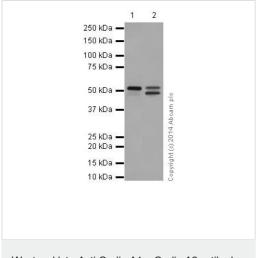
Lane 1: K562 whole cell extract 10 µg (Input).

Lane 2: ab185619 IP in K562 whole cell extract.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab185619 in K562 whole cell extract.

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

Exposure time: 5 seconds



Western blot - Anti-Cyclin A1 + Cyclin A2 antibody [EPR18054] (ab185619)

All lanes : Anti-Cyclin A1 + Cyclin A2 antibody [EPR18054] (ab185619) at 1/1000 dilution

Lane 1 : HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate

Lane 2: HepG2 (Human liver hepatocellular carcinoma) whole cell lysate

Lysates/proteins at 10 µg per lane.

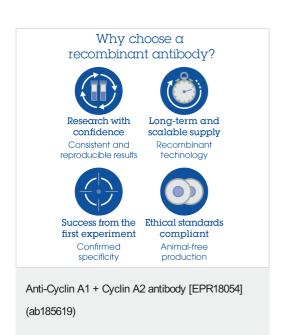
Secondary

All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 52, 49 kDa Observed band size: 49,52 kDa

Exposure time: 3 minutes

5% NFDM/TBST: Blocking and diluting buffer.



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