# abcam

## Product datasheet

## Anti-Cyclin E2 antibody [E142] - BSA and Azide free ab228478



## 6 Images

#### Overview

**Product name** Anti-Cyclin E2 antibody [E142] - BSA and Azide free

**Description** Rabbit monoclonal [E142] to Cyclin E2 - BSA and Azide free

**Host species** Rabbit

**Tested applications** Suitable for: ICC/IF, WB

Species reactivity Reacts with: Mouse, Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control Human breast carcinoma, HeLa cells lysates, Jurkat cell lysate

**General notes** ab228478 is the carrier-free version of ab32103.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.20

Constituent: PBS

Carrier free Yes

Purity Protein A purified

**Clonality** Monoclonal

Clone number E142
Isotype IgG

#### **Applications**

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab228478 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
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 45 kDa.

#### **Target**

Relevance

The human Cyclin E2 gene encodes a 404 amino acid protein that is most closely related to Cyclin E. Cyclin E2 mRNA levels peaks at the G1 / S transition. Cyclin E2 associates with Cdk2 in a functional kinase complex that is inhibited by both p27 (Kip1) and p21 (Cip1). Cyclin E2 / Cdk2 phosphorylates histone H1 in vitro. G1 cyclin E controls the initiation of DNA synthesis by activating CDK2. Abnormally high levels of cyclin E expression have frequently been observed in human cancers. Unlike Cyclin E1, which is expressed in great majority of proliferating normal and neoplastically transformed cells, Cyclin E2 levels are low to undetectable in non transformed cells and increase significantly in neoplasm derived cells.

**Cellular localization** 

Nuclear

#### **Images**



Western blot - Anti-Cyclin E2 antibody [E142] - BSA and Azide free (ab228478)

**All lanes :** Anti-Cyclin E2 antibody [E142] (<u>ab32103</u>) at 1/200 dilution (Purified)

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

Lane 2 : Mouse testis lysate

Lane 3 : Mouse thymus lysate

Lysates/proteins at 20 µg per lane.

## **Secondary**

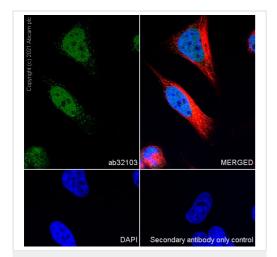
**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

**Predicted band size:** 45 kDa **Observed band size:** 45 kDa

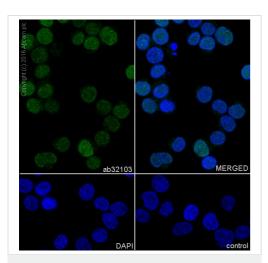
This data was developed using the same antibody clone in a different buffer formulation (**ab32103**)

This data was developed using <u>ab32103</u>, the same antibody clone in a different buffer formulation.

Immunocytochemistry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Cyclin E2 with purified **ab32103** at 1/50 dilution (5.2  $\mu$ g/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5  $\mu$ g/mL). Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2  $\mu$ g/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunocytochemistry/ Immunofluorescence - Anti-Cyclin E2 antibody [E142] - BSA and Azide free (ab228478)

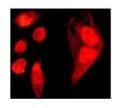


Immunocytochemistry/ Immunofluorescence - Anti-Cyclin E2 antibody [E142] - BSA and Azide free (ab228478)

This ICC data was generated using the same anti-Cyclin E2 antibody clone, E142, in a different buffer formulation (cat# **ab32103**).

Immunocytochemistry/Immunofluorescence analysis of Jurkat cells labelling Cyclin E2 with purified <a href="mailto:ab32103">ab32103</a> at 1/2000. Cells were fixed with 4% Paraformaldehyde and permeabilised with 0.1% tritonX-100. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG (<a href="mailto:ab150077">ab150077</a>) at 1/1000 dilution was used as the secondary antibody. Nuclei counterstained with DAPI (blue).

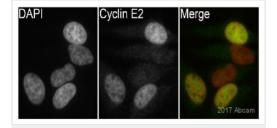
Secondary Only Control: PBS was used instead of the primary antibody as the negative control.



Immunocytochemistry/ Immunofluorescence - Anti-Cyclin E2 antibody [E142] - BSA and Azide free (ab228478)

Immunofluorescent analysis of Cyclin E2 expression in HeLa cell culture using 1/100 **ab32103**.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32103).



Immunocytochemistry/ Immunofluorescence - Anti-Cyclin E2 antibody [E142] - BSA and Azide free (ab228478)

This image is courtesy of an Abreview submitted by Kirk Mcmanus.

**ab32103** staining Cyclin E2 in the Hela cell line from Human cervix by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.5% Triton X-100. Samples were incubated with primary antibody (1/500 in PBS) for 1 hour at 22°C. Ab150081 (1/200) was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32103).



Anti-Cyclin E2 antibody [E142] - BSA and Azide free (ab228478)

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