

Product datasheet

Anti-CDK1 (phospho Y15) + CDK2 (phospho Y15) + CDK3 (phospho Y15) + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free ab248508

Recombinant RabMAb

15 Images

Overview

Product name	Anti-CDK1 (phospho Y15) + CDK2 (phospho Y15) + CDK3 (phospho Y15) + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free
Description	Rabbit monoclonal [EPR7875] to CDK1 (phospho Y15) + CDK2 (phospho Y15) + CDK3 (phospho Y15) + CDK5 (phospho Y15) - BSA and Azide free
Host species	Rabbit
Specificity	The antibody will cross-react with phosphorylated CDK1 (pY15), CDK2 (pY15), CDK3 (pY15) and CDK5 (pY15) but not with non-phosphorylated CDK1, CDK2, CDK3 and CDK5. Please see our ELISA results on the images section.
Tested applications	Suitable for: ELISA, IHC-P, WB, Dot blot
Species reactivity	Reacts with: Mouse, Rat, Human, Recombinant fragment
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
General notes	ab248508 is the carrier-free version of ab133463 .

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 cell-based 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[®] is a trademark of Fluidigm Canada Inc.

This 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

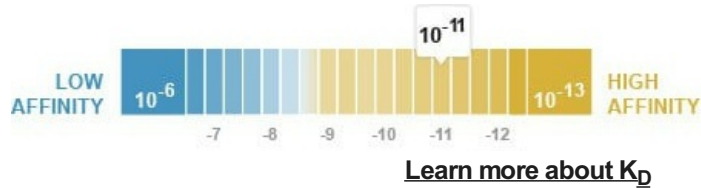
- Animal-free production

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. Do Not Freeze.
Dissociation constant (K_D)	K _D = 4.10 x 10 ⁻¹¹ M



Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR7875
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab248508 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
ELISA		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 34 kDa (predicted molecular weight: 34 kDa).
Dot blot		Use at an assay dependent concentration.

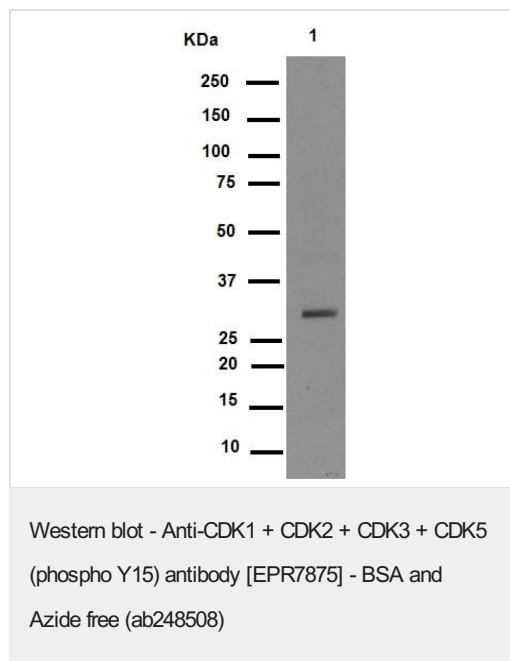
Target

Cellular localization CDK1: Nucleus. CDK5: Cytoplasm. Cell projection > lamellipodium. Cell projection > growth cone. In axonal growth cone with extension to the peripheral lamellipodia.

Form

CDK1: CDK1 can be located to the Nucleus, cytoplasm and Mitochondria. It's cytoplasmic during interphase and reversibly translocated from cytoplasm to the nucleus when phosphorylated before G2-M transition when associated with cyclin-B1. Accumulates in mitochondria in G2-arrested cells upon DNA-damage.

Images



Anti-CDK1 (phospho Y15) + CDK2 (phospho Y15) + CDK3 (phospho Y15) + CDK5 (phospho Y15) antibody [EPR ([ab133463](#))] at 1/1000 dilution (purified) + HeLa cell lysate treated with UV at 10 μ g

Secondary

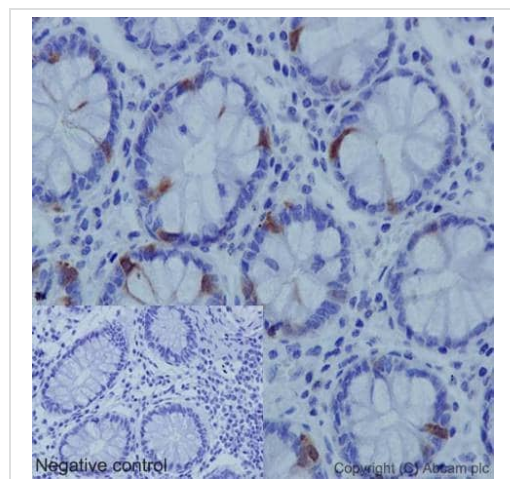
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 34 kDa

Observed band size: 34 kDa

This data was developed using [ab133463](#), the same antibody clone in a different buffer formulation.

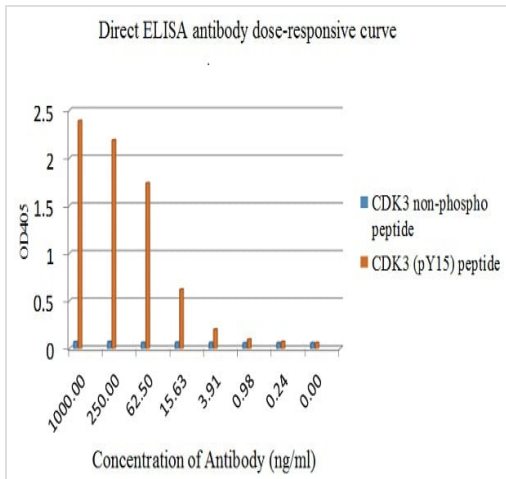
Blocking and dilution buffer: 5% NFDm/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDK1 + CDK2 + CDK3 + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free (ab248508)

This data was developed using [ab133463](#), the same antibody clone in a different buffer formulation.

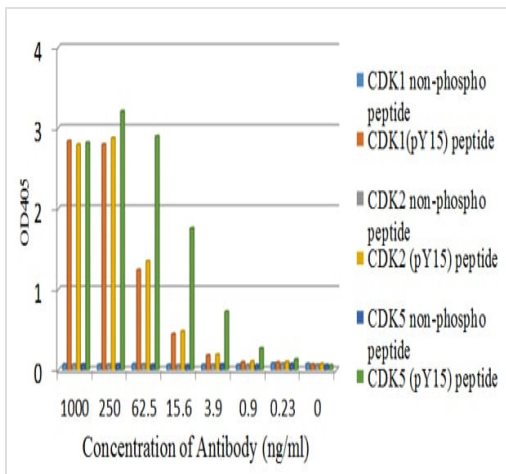
Immunohistochemical staining of paraffin embedded human colon with purified [ab133463](#) at a working dilution of 1 in 75. The secondary antibody used is a HRP polymer for rabbit IgG. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



ELISA - Anti-CDK1 + CDK2 + CDK3 + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free (ab248508)

This data was developed using [ab133463](#), the same antibody clone in a different buffer formulation.

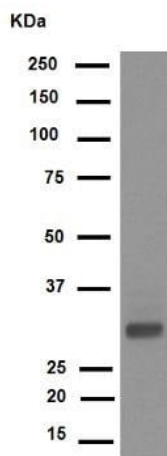
Direct ELISA antibody dose-response curve using purified [ab133463](#) at 0-1000 ng/ml. Antigen concentration of 1000 ng/mL. An alkaline phosphatase-conjugated goat anti-rabbit IgG (H+L) (1/2500) was used as the secondary antibody.



ELISA - Anti-CDK1 + CDK2 + CDK3 + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free (ab248508)

This data was developed using [ab133463](#), the same antibody clone in a different buffer formulation.

Direct ELISA antibody dose-response curve using purified [ab133463](#) at 0-1000 ng/ml. Antigen concentration of 1000 ng/mL. An alkaline phosphatase-conjugated goat anti-rabbit IgG (H+L) (1/2500) was used as the secondary antibody.



Western blot - Anti-CDK1 + CDK2 + CDK3 + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free (ab248508)

Anti-CDK1 (phospho Y15) + CDK2 (phospho Y15) + CDK3 (phospho Y15) + CDK5 (phospho Y15) antibody [EPR ([ab133463](#))] at 1/2000 dilution (purified) + C6 cell lysate at 10 µg

Secondary

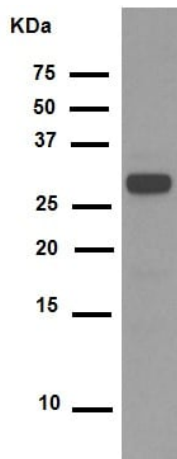
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 34 kDa

Observed band size: 34 kDa

This data was developed using [ab133463](#), the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-CDK1 + CDK2 + CDK3 + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free (ab248508)

Anti-CDK1 (phospho Y15) + CDK2 (phospho Y15) + CDK3 (phospho Y15) + CDK5 (phospho Y15) antibody [EPR ([ab133463](#))] at 1/2000 dilution (purified) + NIH/3T3 cell lysate at 10 µg

Secondary

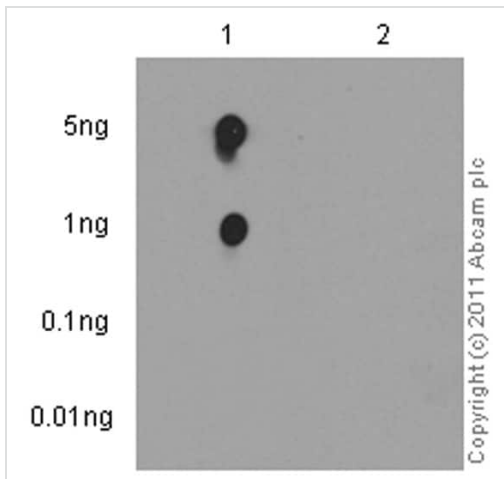
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 34 kDa

Observed band size: 34 kDa

This data was developed using [ab133463](#), the same antibody clone in a different buffer formulation.

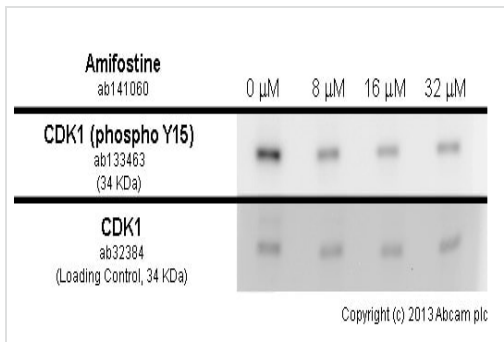
Blocking and dilution buffer: 5% NFDM/TBST.



Dot Blot - Anti-CDK1 + CDK2 + CDK3 + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free (ab248508)

This data was developed using **ab133463**, the same antibody clone in a different buffer formulation.

Dot blot analysis of CDK1+CDK2+CDK3+CDK5 (pY15) phospho peptide (lane 1) and CDK1+CDK2+CDK3+CDK5 non-phospho peptide (lane 2) labelling CDK1+CDK2+CDK3+CDK5 (phospho Y15) with unpurified **ab133463** at a dilution of 1/1000. A peroxidase-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/2500). Blocking and dilution buffer: 5% NFDM/TBST. Exposure time: 10 seconds.

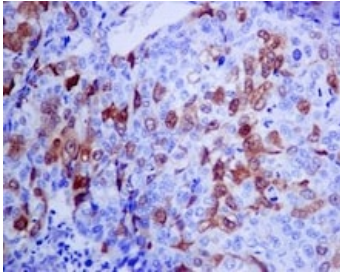


Western blot - Anti-CDK1 + CDK2 + CDK3 + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free (ab248508)

This data was developed using **ab133463**, the same antibody clone in a different buffer formulation.

Saso2 cells were incubated at 37°C for 24 hours with vehicle control (0 μM) and different concentrations of Amifostine (**ab141060**). Decreased expression of CDK1 (phospho Y15) (unpurified **ab133463**) in Saso2 cells correlates with an increase in Amifostine concentration, as described in literature.

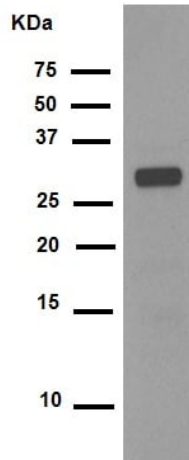
Whole cell lysates were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 10μg of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 5% BSA before being incubated with unpurified **ab133463** at 1 μg/ml and **ab32384** at 1 μg/ml overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP (**ab97051**) at 1/10000 and visualised using ECL development solution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDK1 + CDK2 + CDK3 + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free (ab248508)

This data was developed using [ab133463](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin embedded human breast carcinoma tissue labelling CDK1+CDK2+CDK3+CDK5 with unpurified [ab133463](#) at 1/50 dilution. Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-CDK1 + CDK2 + CDK3 + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free (ab248508)

Anti-CDK1 (phospho Y15) + CDK2 (phospho Y15) + CDK3 (phospho Y15) + CDK5 (phospho Y15) antibody [EPR ([ab133463](#))] at 1/1500 dilution (unpurified) + NIH/3T3 cell lysate at 1/1000 dilution

Secondary

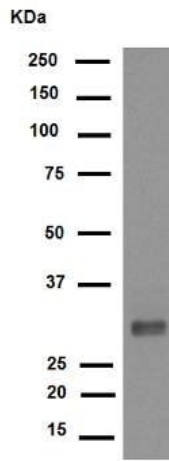
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 34 kDa

Observed band size: 34 kDa

This data was developed using [ab133463](#), the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-CDK1 + CDK2 + CDK3 + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free (ab248508)

Anti-CDK1 (phospho Y15) + CDK2 (phospho Y15) + CDK3 (phospho Y15) + CDK5 (phospho Y15) antibody [EPR ([ab133463](#))] at 1/1500 dilution (unpurified) + C6 cell lysate at 10 μ g

Secondary

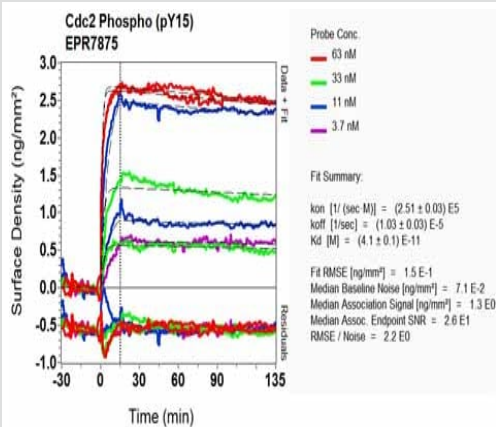
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 34 kDa

Observed band size: 34 kDa

This data was developed using [ab133463](#), the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

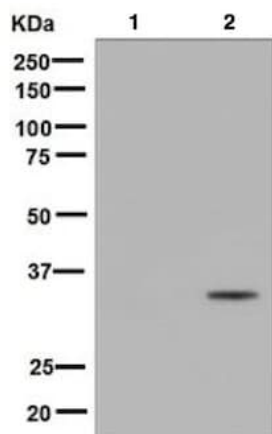


SPR Scanning - Anti-CDK1 + CDK2 + CDK3 + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free (ab248508)

This data was developed using [ab133463](#), the same antibody clone in a different buffer formulation. Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)



Western blot - Anti-CDK1 + CDK2 + CDK3 + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free (ab248508)

All lanes : Anti-CDK1 (phospho Y15) + CDK2 (phospho Y15) + CDK3 (phospho Y15) + CDK5 (phospho Y15) antibody [EPR ([ab133463](#)) at 1/1000 dilution (unpurified)

Lane 1 : HeLa cell lysate

Lane 2 : HeLa cell lysate treated with UV

Lysates/proteins at 10 µg per lane.

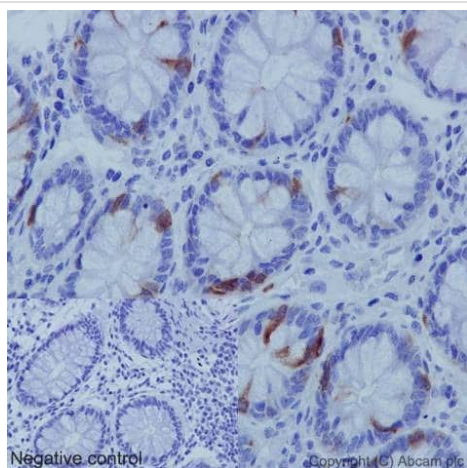
Secondary

All lanes : HRP labelled goat anti-rabbit IgG at 1/2000 dilution

Predicted band size: 34 kDa

Observed band size: 34 kDa

This data was developed using [ab133463](#), the same antibody clone in a different buffer formulation.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDK1 + CDK2 + CDK3 + CDK5 (phospho Y15) antibody [EPR7875] - BSA and Azide free (ab248508)

This data was developed using [ab133463](#), the same antibody clone in a different buffer formulation. Immunohistochemical staining of paraffin embedded human colon with unpurified [ab133463](#) at a working dilution of 1 in 50. The secondary antibody used is a HRP polymer for rabbit IgG. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-CDK1 + CDK2 + CDK3 + CDK5 (phospho Y15)
antibody [EPR7875] - BSA and Azide free
(ab248508)

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

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