abcam

Product datasheet

Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] ab133463

Recombinant RabMAb

2 Abreviews 8 References 14 Images

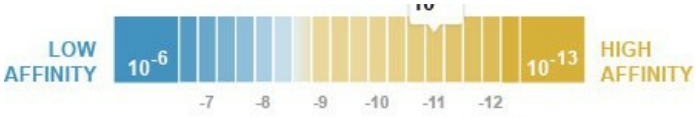
Overview

Product name	Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875]
Description	Rabbit monoclonal [EPR7875] to CDK1+CDK2+CDK5+CDK3 (phospho Y15)
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:** WB, IHC-P, ELISA, Dot blot
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) within Human CDK1+CDK2+CDK5+CDK3 (phospho Y15). The exact sequence is proprietary.
Positive control	HeLa cell lysate treated with UV, human colon, C6 cell lysate, NIH/3T3 cell lysate, Saso2 cells, human breast carcinoma tissue
General notes	A trial size is available to purchase for this antibody. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents **We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.** This product is a recombinant rabbit monoclonal antibody.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	$K_D = 4.10 \times 10^{-11}$ M

10^{-11}



Learn more about K_D

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR7875
Isotype	IgG

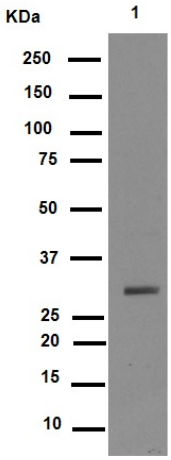
Applications

Our Abpromise guarantee covers the use of **ab133463** 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 - 1/2000. Detects a band of approximately 34 kDa (predicted molecular weight: 34 kDa).
IHC-P		1/50 - 1/75. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ELISA		Use at an assay dependent concentration.
Dot blot		1/1000.

Images



Western blot - Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463)

Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463) at 1/1000 dilution (purified) + HeLa cell lysate treated with UV at 10 µg

Secondary

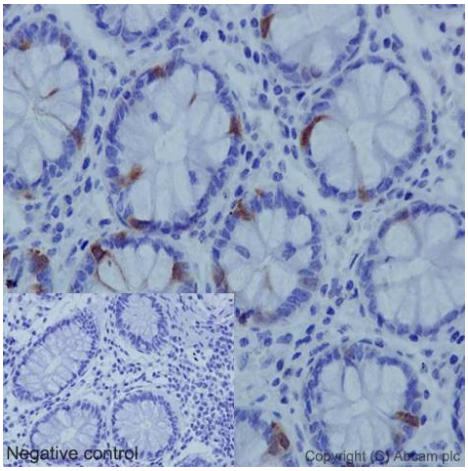
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 34 kDa

Observed band size: 34 kDa

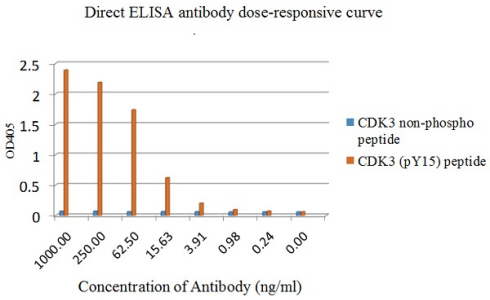
Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



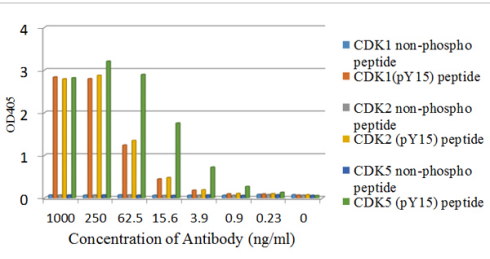
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463)

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 perfomed 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+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463)

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.



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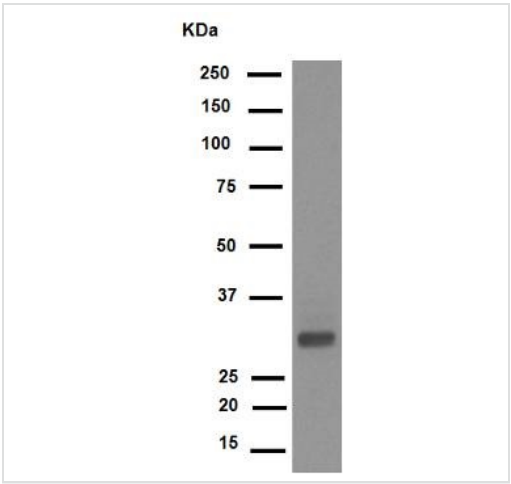


Western blot - Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463)

Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463) at 1/2000 dilution (purified) + C6 cell lysate at 10 µg

Secondary

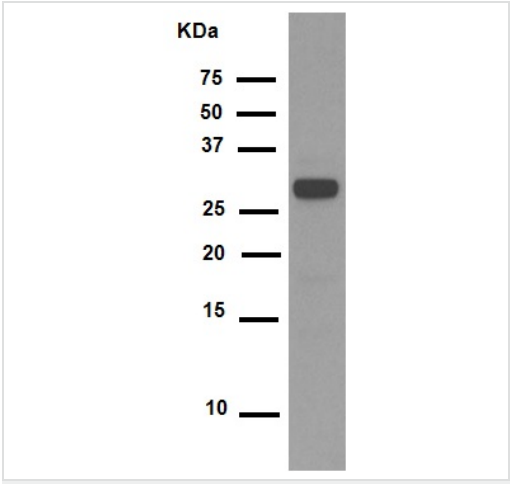
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 34 kDa

Observed band size: 34 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463)

Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463) at 1/2000 dilution (purified) + NIH/3T3 cell lysate at 10 µg

Secondary

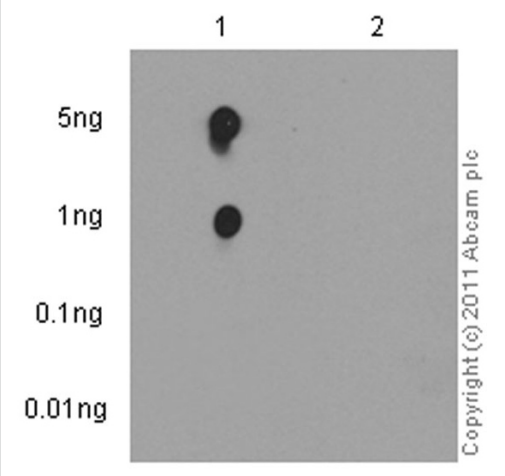
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 34 kDa

Observed band size: 34 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST

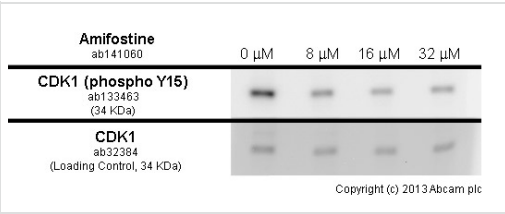


Dot Blot - Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463)

Dot blot analysis of CDK1 (pY15) phospho peptide (lane 1) and CDK1 non-phospho peptide (lane 2) labelling CDK1 (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.

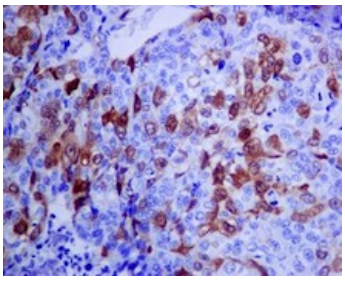
Exposure time: 10 seconds.



Western blot - Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463)

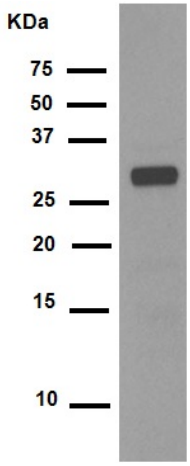
Saso2 cells were incubated at 37°C for 24 hours with vehicle control (0 µM) and different concentrations of Amifostine (ab141060). Decreased expression of CDK1 (phospho Y15) (unpurified ab133463) in Saso2 cells correlates with an increase in Amifostine concentration, as described in literature.

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+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463)

Immunohistochemical analysis of paraffin embedded human breast carcinoma tissue labelling CDK1 with unpurified ab133463 at 1/50 dilution.



Western blot - Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463)

Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463) at 1/1500 dilution (unpurified) + NIH/3T3 cell lysate at 1/1000 dilution

Secondary

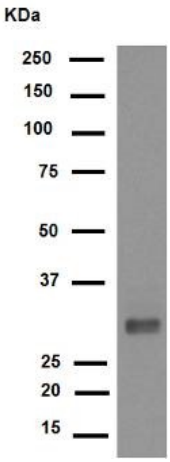
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 34 kDa

Observed band size: 34 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



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Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463) at 1/1500 dilution (unpurified) + C6 cell lysate at 10 µg

Secondary

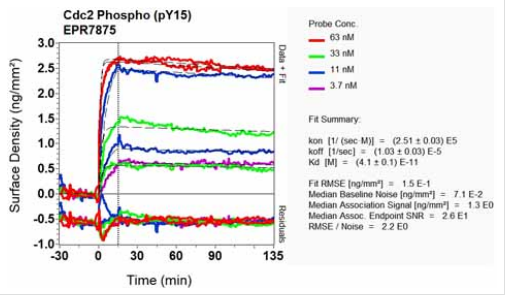
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 34 kDa

Observed band size: 34 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST

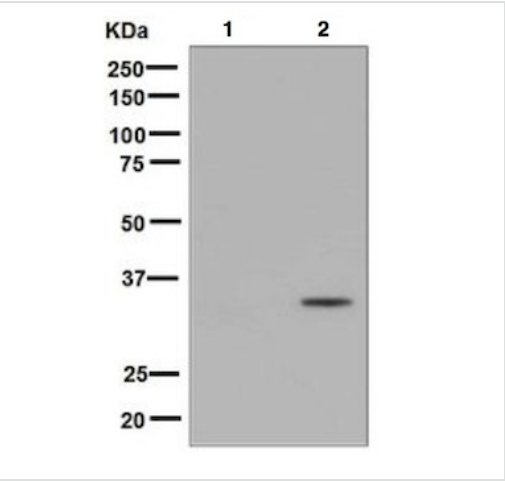


Other - Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D



Western blot - Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463)

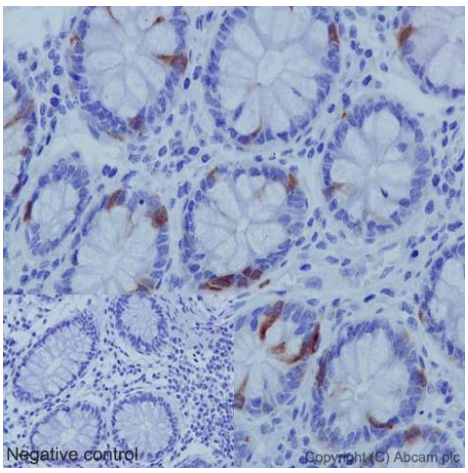
All lanes : Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463) at 1/1000 dilution (unpurified)

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDK1+CDK2+CDK5+CDK3 (phospho Y15) antibody [EPR7875] (ab133463)

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 perfomed 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.

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