Phospho-CDK1 (Thr14, Tyr15) Recombinant Polyclonal Antibody (17 HCLC)

Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Human
Host/Isotype	Rabbit / IgG
Expression system	Expi293
Class	Recombinant Polyclonal
Type	Antibody
Clone	17 HCLC
Conjugate	Unconjugated
Immunogen	Phosphorylated peptide corresponding to Human CDK1 (aa 11-19)
Form	Liquid
Concentration	0.5 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2609689

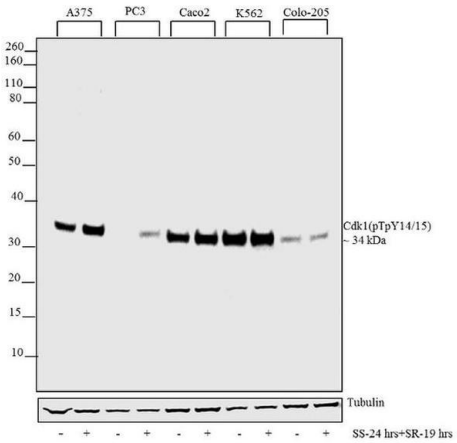
Applications	**Tested Dilution**	**Publications**
Western Blot (WB)	1-2 µg/mL	2 Publications
Immunocytochemistry (ICC/IF)	1-2 µg/mL	-

Product Specific Information

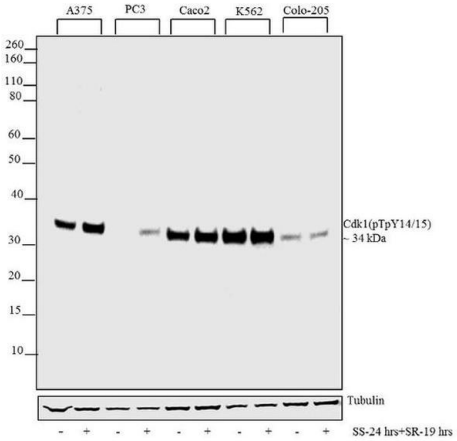
This antibody is predicted to react with Monkey, Rat, Mouse, Rabbit, Bovine, Pig and Feline.

Recombinant rabbit polyclonal antibodies are unique offerings from Thermo Fisher Scientific. They are comprised of a selection of multiple different recombinant monoclonal antibodies, providing the best of both worlds - the sensitivity of polyclonal antibodies with the specificity of monoclonal antibodies - all delivered with the consistency only found in a recombinant antibody. While functionally the same as a polyclonal antibody - recognizing multiple epitope sites on the target and producing higher detection sensitivity for low abundance targets - a recombinant rabbit polyclonal antibody has a known mixture of light and heavy chains. The exact population can be produced in every lot, circumventing the biological variability typically associated with polyclonal antibody production.

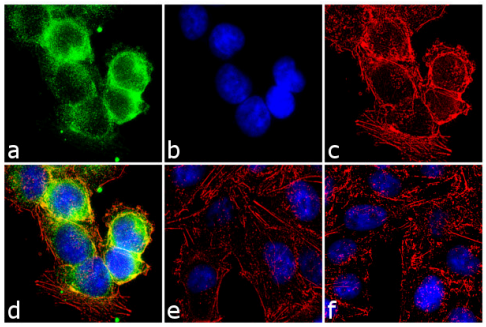
Product Images For Phospho-CDK1 (Thr14, Tyr15) Recombinant Polyclonal Antibody (17 HCLC)



Phospho-CDK1 (Thr14, Tyr15) Antibody (710840)
Altered expression of proteins upon cell treatment demonstrates antibody specificity. Western blot of Phospho-CDK1 (Thr14, Tyr15) using Anti-Phospho-CDK1 (Thr14, Tyr15) Recombinant Rabbit Polyclonal Antibody (Product # 710840), shows increased expression of Phospho-CDK1 (Thr14, Tyr15) in A-375, PC-3, Caco-2, K-562 and COLO 205 upon serum starvation and release. {TM}



Phospho-CDK1 (Thr14, Tyr15) Antibody (710840) in WB
Western blot analysis was performed on whole cell extracts (30 µg lysate) of A375 (1), A375 (Serum starved24 hours and released for 19 hours) (2), PC3 (3), PC3 (Serum starved24 hours and released for 19 hours) (4), Caco2 (5), Caco2 (Serum starved24 hours and released for 19 hours) (6), K562 (7), K562 (Serum starved24 hours and released for 19 hours) (8), Colo-205 (9) and Colo-205 (Serum starved24 hours and released for 19 hours) (10). The blots were probed with Anti-Cdk1 (pTpY14/15) Recombinant Rabbit Polyclonal Antibody (Product # 710840, 1-2 µg/mL) and detected by chemiluminescence using Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, HRP conjugate (Product # A27036, 0.4 µg/mL, 1:2500 dilution). A 34 kDa band corresponding to Cdk1 (pTpY14/15) was observed across cell lines tested. Treatment response is more evident in cell lines where basal expression is less. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 4-12% Bis-Tris gel (Product # NP0321BOX), XCell SureLock™ Electrophoresis System (Product # EI0002), and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® Dry Blotting System (Product # IB21001). The membrane was probed with the relevant primary and secondary Antibody following blocking with 5% skimmed milk. Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrat



Phospho-CDK1 (Thr14, Tyr15) Antibody (710840) in ICC/IF
Immunofluorescence was performed on fixed and permeabilized A375 cells which were serum starved (19 hours) and serum released (24 hours) for detection of Cdk1 (pTpY14/15) using Anti-Cdk1 (pTpY14/15) Recombinant Rabbit Polyclonal Antibody (Product # 710840, 1-2 µg/mL) and labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034, 1:2000). Panel a) shows representative cells that were stained for detection and localization of Cdk1 (pTpY14/15) protein (green), Panel b) is stained for nuclei (blue) using SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). Panel c) represents cytoskeletal F-actin staining using Alexa Fluor® 555 Rhodamine Phalloidin (Product # R415, 1:300). Panel d) is a composite image of Panels a, b and c clearly demonstrating cytoplasmic localization of Cdk1 (pTpY14/15) Panel e) shows no signal which demonstrates antibody specificity against Cdk1 (pTpY14/15) phosphorylated peptide (Antibody was incubated with phosphorylated peptide for 1 hour/37C). Panel f) represents control cells with no primary Antibody to assess background.

View more figures on thermofisher.com

2 References

Western Blot (2)

International journal of molecular sciences

In Silico Identification of Small Molecules as New Cdc25 Inhibitors through the Correlation between Chemosensitivity and Protein Expression Pattern.

"Published figure using Phospho-CDK1 (Thr14, Tyr15) recombinant polyclonal antibody (Product # 710840) in Western Blot"

Authors: Lauria A,Martorana A,La Monica G,Mannino S,Mannino G,Peri D,Gentile C

Year
2021

Cell reports

The Tumor Suppressor MIG6 Controls Mitotic Progression and the G2/M DNA Damage Checkpoint by Stabilizing the WEE1 Kinase.

"710840 was used in Western Blotting to identify a critical role of MIG6 in cell cycle progression that is likely to contribute to its potent tumour-suppressive properties."

Authors: Sasaki M,Terabayashi T,Weiss SM,Ferby I

Year
2018

Species
Human