abcam

ab76025

Anti-Casein Kinase 2 beta antibody [EP1995Y]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.05% Sodium azide Constituents: 50% Tissue culture supernatant, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EP1995Y
Purification technique	Affinity purification Protein A
Concentration	0.107 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	100-250 mg/mL
Notes	Perform heat-mediated antigen retrieval before commencing with IHC staining protocol.

Expected

Species	Horse
Dilution info	1/100 - 1/250
Notes	Perform heat-mediated antigen retrieval before commencing with IHC staining protocol.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Horse, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/500 - 1/2000
Notes	-

Predicted

Species	Mouse, Rat, Horse
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100 - 1/250
Notes	-

Predicted

Species	Mouse, Rat, Horse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/20
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat, Horse
Dilution info	-
Notes	-

Target data

See full target information CSNK2B

Function Regulatory subunit of casein kinase II/CK2. As part of the kinase complex regulates the basal catalytic activity of the alpha subunit a constitutively active serine/threonine-protein kinase that phosphorylates a large number of substrates containing acidic residues C-terminal to the phosphorylated serine or threonine (PubMed:11239457, PubMed:16818610). Participates in Wnt signaling (By similarity). (Microbial infection) Upon infection with Epstein-Barr virus (EBV), the interaction with viral EBNA1 increases the association of CK2 with PML proteins, which increases PML phosphorylation by CK2, triggering the polyubiquitylation

and degradation of PML (PubMed:20719947, PubMed:24216761). Seems to also suppress EBV reactivation by mediating ARK2N and JUN at the Z promoter which inhibits BZLF1 transcrition (PubMed:31341047).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

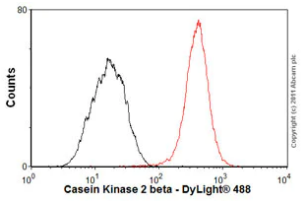
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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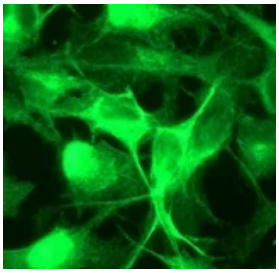
5 product images



Flow Cytometry (Intracellular) - Anti-Casein Kinase 2 beta antibody [EP1995Y] (ab76025)

Casein Kinase 2 beta Flow Cytometry (Intracellular) staining using rabbit Anti-Casein Kinase 2 beta antibody

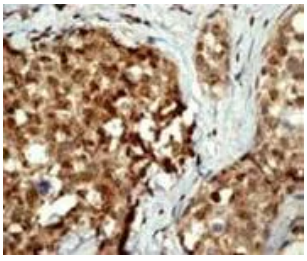
Overlay histogram showing HeLa cells stained with ab76025 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab76025, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.



Immunocytochemistry/ Immunofluorescence - Anti-Casein Kinase 2 beta antibody [EP1995Y] (ab76025)

Casein Kinase 2 beta Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Casein Kinase 2 beta antibody

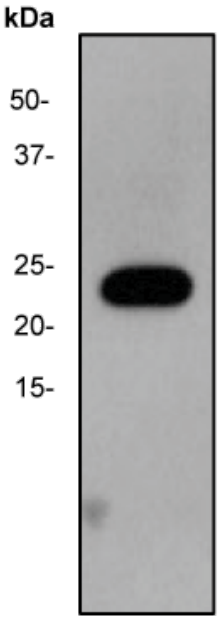
Immunofluorescent staining of Casein Kinase 2 beta in HeLa cells using ab76025 at a 1/100 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Casein Kinase 2 beta antibody [EP1995Y] (ab76025)

Casein Kinase 2 beta Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Casein Kinase 2 beta antibody

Immunohistochemical analysis of Casein Kinase 2 beta in paraffin embedded human ovary carcinoma tissue using ab76025 at a 1/100 dilution.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-Casein Kinase 2 beta antibody [EP1995Y] (ab76025)

Casein Kinase 2 beta Western blot staining of K562 cell lysate using rabbit Anti-Casein Kinase 2 beta antibody

All lanes:
Western blot - Anti-Casein Kinase 2 beta antibody [EP1995Y] (ab76025) at 1/1000 dilution

All lanes:
K562 cell lysate at 10 µg

Secondary

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

Predicted band size: 24 kDa

Observed band size: 25 kDa

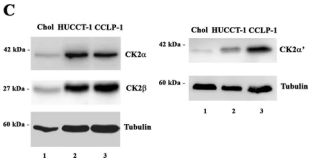


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Western blot - Anti-Casein Kinase 2 beta antibody [EP1995Y] (ab76025)

Casein Kinase 2 beta Western blot staining using rabbit Anti-Casein Kinase 2 beta antibody

Casein Kinase 2 beta western blot using anti-Casein Kinase 2 beta antibody [EP1995Y] ab76025. Publication image and figure legend from Di Maira, G., Gentilini, A., et al., 2019, Oncogenesis, PubMed 31641101.

ab76025 was used in this publication in western blot. This may not be the same as the application(s) guaranteed by Abcam. For a full list of applications guaranteed by Abcam for ab76025 please see the product overview.

Expression and activity of CK2 in cholangiocarcinoma samples and CCA cells lines.a Expression of CK2 catalytic (CSNK2A1 and CSNK2A2) and regulatory (CSNK2B) subunits in human CCA tissues. CK2α, CK2α' and CK2β mRNA expression were significantly increased in tumor lesions (T) (n = 104) compared to surrounding matched normal liver tissue (SL) (n = 60) using transcriptome data of CCA patients35. Statistical significance was determined by nonparametric Mann–Whitney test. Individual patient data are shown, and the thick horizontal line indicates the mean of the values. §, $p < 0.001$ vs. T. b Relative quantitation of gene expression of CK2α, CK2α' and CK2β in cholangiocytes, HUCCT-1 and CCLP-1 cells. *$p < 0.05$ versus cholangiocytes. (c) Twenty µg (left panel) or 40 µg (right panel) of proteins from total cell lysate were analyzed by Western blot with the indicated antibodies. Tubulin was used as a loading control. d Activity of CK2 in cell lysates was measured using a CK2-specific peptide substrate. *$p < 0.05$ versus cholangiocytes

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