abcam

ab325170

Anti-CCK4 antibody [EPR30150-507]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR30150-507
Purification technique	Affinity purification Protein A
Concentration	0.518 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Mouse
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Mouse
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1/500
Notes	-

Not recommended

Species	Mouse
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Not recommended

Species	Mouse
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/200
Notes	-

Not recommended

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information PTK7

Function	Inactive tyrosine kinase involved in Wnt signaling pathway. Component of both the non-canonical (also known as the Wnt/planar cell polarity signaling) and the canonical Wnt signaling pathway. Functions in cell adhesion, cell migration, cell polarity, proliferation, actin cytoskeleton reorganization and apoptosis. Has a role in embryogenesis, epithelial tissue organization and angiogenesis.

Storage

Shipped at conditions	Conditional Ambient

Appropriate short-term storage duration	1-2 weeks
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

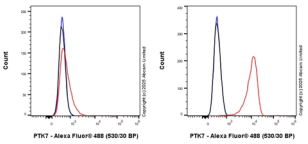
We do not recommend this combination. It is not covered by our product promise.

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.

13 product images



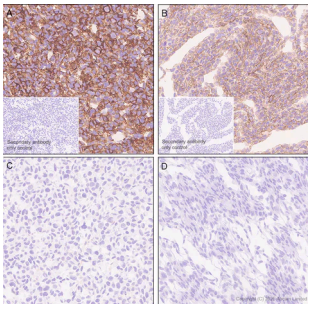
Flow Cytometry - Anti-CCK4 antibody [EPR30150-507] (ab325170)

CCK4 Flow Cytometry staining using rabbit Anti-CCK4 antibody

Flow cytometric analysis of A549 (human lung carcinoma epithelial cell, Left) / A431 (human epidermoid carcinoma epithelial cell, Right) cells labelling CCK4 with ab325170 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells.
Low expression: A549.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CCK4 antibody [EPR30150-507] (ab325170)

CCK4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CCK4 antibody

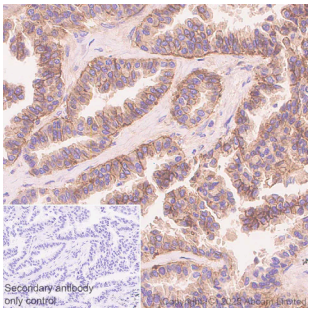
Immunohistochemical analysis of paraffin-embedded (A) A431 (human epidermoid carcinoma epithelial cell) cell pellet (B) HCT116 (human colorectal carcinoma epithelial cell) cell pellet (C) HT-1080 (human fibrosarcoma epithelial cell) cell pellet (D) A549 (human lung carcinoma epithelial cell) cell pellet tissue labeling CCK4 with ab325170 at 1/2000 (0.257 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on A431 (image A) and HCT116 (image B), no staining on HT-1080 (image C) and A549 (image D). The primary antibody was incubated for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CCK4 antibody [EPR30150-507] (ab325170)

CCK4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human lung carcinoma using rabbit Anti-CCK4 antibody

Immunohistochemical analysis of paraffin-embedded Human lung carcinoma tissue labeling CCK4 with ab325170 at 1/500 (1.026 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

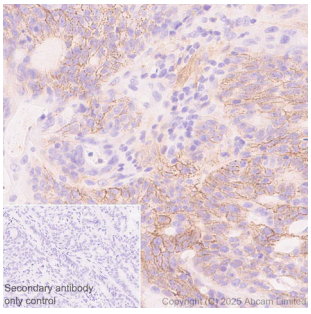
Positive staining on human lung carcinoma. The primary antibody was incubated for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CCK4 antibody [EPR30150-507] (ab325170)

CCK4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human colon carcinoma using rabbit Anti-CCK4 antibody

Immunohistochemical analysis of paraffin-embedded Human colon carcinoma tissue labeling CCK4 with ab325170 at 1/500 (1.026 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

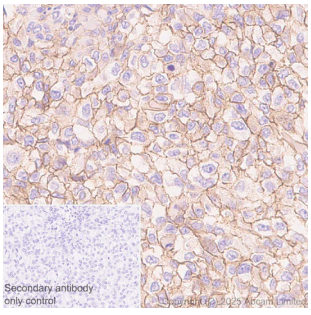
Positive staining on human colon carcinoma. The primary antibody was incubated for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CCK4 antibody [EPR30150-507] (ab325170)

CCK4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human breast carcinoma using rabbit Anti-CCK4 antibody

Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue labeling CCK4 with ab325170 at 1/500 (1.026 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

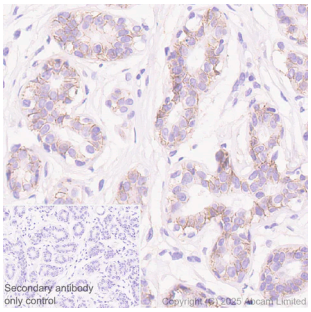
Positive staining on human breast carcinoma. The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CCK4 antibody [EPR30150-507] (ab325170)

CCK4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human breast using rabbit Anti-CCK4 antibody

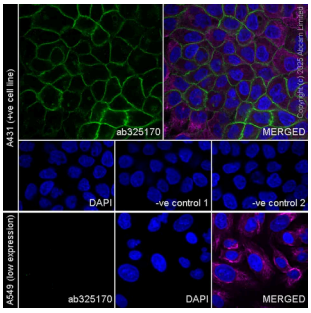
Immunohistochemical analysis of paraffin-embedded Human breast tissue labeling CCK4 with ab325170 at 1/500 (1.026 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on human breast. The primary antibody was incubated for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunocytochemistry/ Immunofluorescence - Anti-CCK4 antibody [EPR30150-507] (ab325170)

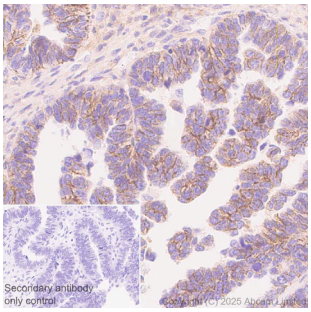
CCK4 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CCK4 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized A431 (human epidermoid carcinoma epithelial cell); A549 (human lung carcinoma epithelial cell) cells labelling CCK4 with ab325170 at 1/200 (2.565 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (Green).

Confocal image showing membrane staining in A431 cell line (shown in green). The counterstain was observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).
Low expression: A549.

ab7291 Anti-alpha Tubulin mouse monoclonal antibody was used to counterstain tubulin at 1/1000 dilution (Magenta). The Nuclear counterstain was DAPI (Blue).

-ve control 1: ab325170 at 1/200 dilution, followed by ab150120 Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) at 1/1000 dilution.
-ve control 2: ab7291 at 1/1000 dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CCK4 antibody [EPR30150-507] (ab325170)

CCK4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human ovarian carcinoma using rabbit Anti-CCK4 antibody

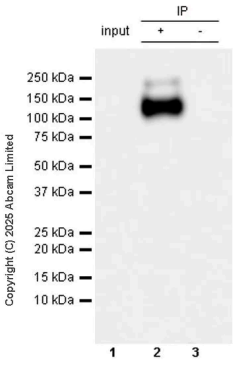
Immunohistochemical analysis of paraffin-embedded Human ovarian carcinoma tissue labeling CCK4 with ab325170 at 1/500 (1.026 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on human ovarian carcinoma. The primary antibody was incubated for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunoprecipitation - Anti-CCK4 antibody [EPR30150-507] (ab325170)

CCK4 was immunoprecipitated from 0.35 mg HCT 116 (human colorectal carcinoma epithelial cell) whole cell lysate with ab325170 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab325170 at 1/1000 dilution.

Blocking and dilution buffer and concentration: 5% NFDM/TBST

All lanes:
Immunoprecipitation - Anti-CCK4 antibody [EPR30150-507] (ab325170) at 1/30 dilution

Lane 1:
HCT 116 (human colorectal carcinoma epithelial cell) whole cell lysate 10 µg

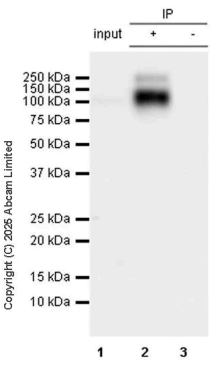
Lane 2:
ab325170 1:30 IP in HCT 116 (human colorectal carcinoma epithelial cell) whole cell lysate

Lane 3:
Rabbit monoclonal IgG (ab172730) instead of ab325170 in HCT 116 whole cell lysate

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Exposure time: 10s



Immunoprecipitation - Anti-CCK4 antibody [EPR30150-507] (ab325170)

CCK4 was immunoprecipitated from 0.35 mg A431 (human epidermoid carcinoma epithelial cell) whole cell lysate with ab325170 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab325170 at 1/1000 dilution.

Blocking and dilution buffer and concentration: 5% NFDM/TBST

All lanes:
Immunoprecipitation - Anti-CCK4 antibody [EPR30150-507] (ab325170) at 1/30 dilution

Lane 1:
A431 (human epidermoid carcinoma epithelial cell) whole cell lysate

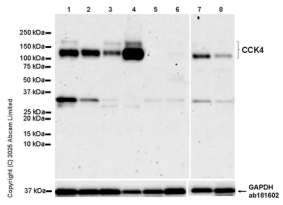
Lane 2:
ab325170 1:30 IP in A431 (human epidermoid carcinoma epithelial cell) whole cell lysate

Lane 3:
Rabbit monoclonal IgG (ab172730) instead of ab325170 in A431 whole cell lysate

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Exposure time: 3s



Western blot - Anti-CCK4 antibody [EPR30150-507] (ab325170)

CCK4 Western blot staining using rabbit Anti-CCK4 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Low expression: A549, HT-1080(PMID: 25006253), colon

The expression profile observed is consistent with what has been described in the literature(PMID: 25006253)

This antibody can recognize both the full-length PTK7 and the N-terminal PTK7. The 160 kDa form may represent the full-length protein with glycosylation modifications, while the 110 kDa form likely corresponds to the N-terminal PTK7 glycosylation modification.

The identity of the bands lower than 37kDa are unknown.

Lanes 1-6 are incubated with Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/20000 and lanes 7-9 are incubated with Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

All lanes:
Western blot - Anti-CCK4 antibody [EPR30150-507] (ab325170) at 1/1000 dilution

Lane 1:
HCT 116 (human colorectal carcinoma epithelial cell) whole cell lysate at 20 µg

Lane 2:
HT-29 (human colorectal adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 3:
HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 4:
A431 (human epidermoid carcinoma epithelial cell) whole cell lysate at 20 µg

Lane 5:
A549 (human lung carcinoma epithelial cell) whole cell lysate at 20 µg

Lane 6:
HT-1080 (human fibrosarcoma epithelial cell) whole cell lysate at 20 µg

Lane 7:
Human lung tissue lysate at 20 µg

Lane 8:
Human colon tissue lysate at 20 µg

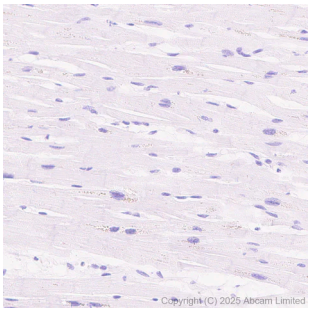
Secondary

Lanes 1 - 6:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Lanes 7 - 8:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Observed band size: 110 kDa, 160 kDa, 36 kDa

Exposure time: 180s



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CCK4 antibody [EPR30150-507] (ab325170)

CCK4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human cardiac muscle using rabbit Anti-CCK4 antibody

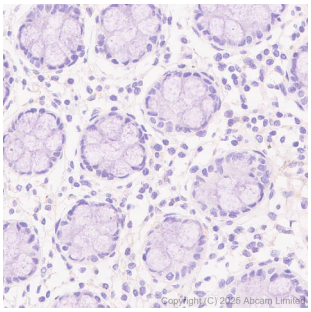
Immunohistochemical analysis of paraffin-embedded Human cardiac muscle tissue labeling CCK4 with ab325170 at 1/500 (1.026 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Low expression tissue: no staining on human cardiac muscle. The primary antibody was incubated for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CCK4 antibody [EPR30150-507] (ab325170)

CCK4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human colon using rabbit Anti-CCK4 antibody

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling CCK4 with ab325170 at 1/500 (1.026 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Low expression tissue: no staining on human colon (PMID: 27499181). The primary antibody was incubated for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.