abcam

ab190950

Anti-CacyBP antibody

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.06% Sodium azide, 0.06% Thimerosal (merthiolate) Constituents: 30.83% BSA, 5.55% Sodium chloride, 1.23% Disodium hydrogenorthophosphate
Form	Liquid
Clonality	Polyclonal
Immunogen	Synthetic Peptide within Human CACYBP aa 150-200. The exact immunogen used to generate this antibody is proprietary information. Database link Q9HB71
Purification technique	Affinity purification Immunogen
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	0.5-2 µg/mL
Notes	-

Expected

Species	Rat, Mouse

Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	5 µg/mL
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Rat
Dilution info	0.1-0.5 µg/mL
Notes	-

Species	Mouse
Dilution info	0.1-0.5 µg/mL
Notes	-

Species	Human
Dilution info	0.1-0.5 µg/mL
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1-3 µg for 10^6 Cells
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information CACYBP

Function	May be involved in calcium-dependent ubiquitination and subsequent proteasomal degradation of target proteins. Probably serves as a molecular bridge in ubiquitin E3 complexes. Participates in the ubiquitin-mediated degradation of beta-catenin (CTNNB1).

Storage

Shipped at conditions	Blue Ice
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

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	CacyBP also known as Calcyclin Binding Protein is involved in various cellular processes and interactions. This protein has a molecular mass of about 30 kDa. It

	is broadly expressed in many tissues including the brain where it plays significant roles. CacyBP interacts with several other proteins impacting cellular structures and functions through complex interactions.
Biological function summary	CacyBP regulates key cellular functions by interacting with signaling pathways and cytoskeletal elements. It can form part of multi-protein complexes influencing the stability and structure of cytoskeletal components. CacyBP also modifies proteins by dephosphorylation impacting processes such as cell division and differentiation. These functions underline its involvement in cellular maintenance and dynamic processes.
Pathways	CacyBP participates in cellular signaling and protein degradation pathways. It plays a role in the ubiquitin-proteasome pathway by mediating the degradation of specific substrate proteins. This protein associates with Siah-1 an E3 ubiquitin-protein ligase emphasizing its function in this pathway. CacyBP is also linked to ERK1/2 signaling pathways interacting with proteins like ERK2 to modulate cell proliferation and differentiation.
Associated diseases and disorders	CacyBP has connections to cancer and neurodegenerative diseases. In cancer CacyBP influences tumor growth and progression by affecting cell cycle regulation and apoptosis. It interacts with proteins such as p53 which play roles in cell cycle control and tumor suppression. In neurodegenerative diseases like Alzheimer's altered CacyBP expression levels have been observed implicating it in the disorder’s pathology through interactions with tau protein.

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

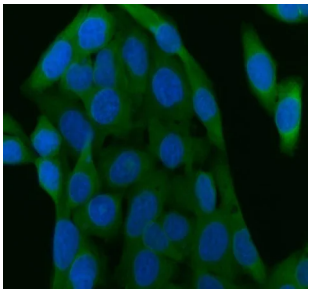
We do not recommend this combination. It is not covered by our product promise.

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:

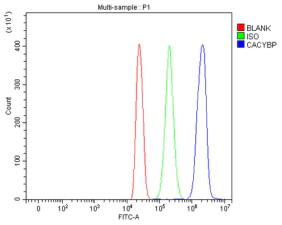
4 product images



Immunocytochemistry/ Immunofluorescence - Anti-CacyBP antibody (ab190950)

CacyBP Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CacyBP antibody

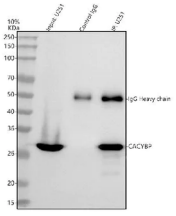
CACYBP was detected in an immunocytochemical section of Hela cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 µg/mL ab190950 overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI.



Flow Cytometry - Anti-CacyBP antibody (ab190950)

CacyBP Flow Cytometry staining using rabbit Anti-CacyBP antibody

Overlay histogram showing HL-60 cells stained with ab190950 (Blue). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with ab190950 1 µg/1x10^6 cells for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG 5-10 µg/1x10^6 cells was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green) was rabbit IgG (1 µg/1x10^6) used under the same conditions. Unlabelled sample (Red) was also used as a control.



Immunoprecipitation - Anti-CacyBP antibody (ab190950)

CacyBP was immunoprecipitated from U251 whole cell lysate with ab190950. Western blot was performed on the immunoprecipitate using ab190950 at 0.5 ug/ml followed by a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using ECL Plus Western Blotting Substrate.

Lane 1: U251 whole cell lysates, 30 ug
Lane 2: Rabbit control IgG instead of anti-CACYBP antibody in U251 whole cell lysate
Lane 3: Ranti-CACYBP antibody (2µg) + U251 whole cell lysate (500µg)

Lanes 1 and 3:
Immunoprecipitation - Anti-CacyBP antibody (ab190950) at 0.5 µg/mL

Lane 2:
Rabbit control IgG

Lane 1:
U251 whole cell lysates at 30 µg

Lane 2:
Rabbit control IgG instead of anti-CACYBP antibody in U251 whole cell lysate

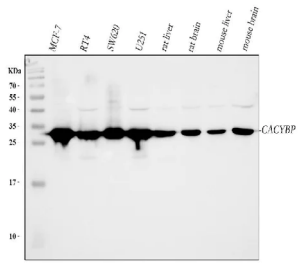
Lane 3:
Ranti-CACYBP antibody (2µg) + U251 whole cell lysate (500µg)

Secondary

All lanes:
goat anti-rabbit IgG-HRP secondary antibody

Predicted band size: 27 kDa

Observed band size: 27 kDa



Western blot - Anti-CacyBP antibody (ab190950)

CacyBP Western blot staining using rabbit Anti-CacyBP antibody

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with ab190950 at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1/5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CACYBP at approximately 27 kDa. The expected band size for CACYBP is at 27 kDa.
All lanes:
Western blot - Anti-CacyBP antibody (ab190950) at 0.5 µg/mL

Lane 1:
human MCF-7 whole cell lysates, at 30 µg

Lane 2:
human RT4 whole cell lysates, at 30 µg

Lane 3:
human SW620 whole cell lysates, at 30 µg

Lane 4:
human U251 whole cell lysates, at 30 µg

Lane 5:
rat liver tissue lysates, at 30 µg

Lane 6:
rat brain tissue lysates, at 30 µg

Lane 7:
mouse liver tissue lysates, at 30 µg

Lane 8:
mouse brain tissue lysates. at 30 µg

Secondary

All lanes:
goat anti-rabbit IgG-HRP at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

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