abcam

ab249049

Anti-Cytohesin 1 antibody [EPR10051] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR10051
Purification technique	Affinity purification

Reactivity data

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information CYTH1

Function	Promotes guanine-nucleotide exchange on ARF1, ARF5 and ARF6. Promotes the activation of ARF factors through replacement of GDP with GTP. Plays an important role in membrane trafficking, during junctional remodeling and epithelial polarization, through regulation of ARF6 activity.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab249049 is the carrier-free version of ab151732.

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.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes,

oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

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

Activity summary	Cytohesin 1 also known as CYTH1 or PSCD1 belongs to the cytohesin family. It plays a role as a guanine nucleotide exchange factor (GEF) specifically for Arf (ADP-ribosylation factor) proteins. Cytohesin 1 weighs approximately 47 kDa. It contributes to cellular communication and membrane trafficking activities by activating Arf family GTPases. You can find it widely expressed in tissues including immune cells and the nervous system. It localizes to cytoplasmic regions and associates with the plasma membrane through a pleckstrin homology (PH) domain.
Biological function summary	Cytohesin 1 influences multiple cellular processes like actin cytoskeleton remodeling cell migration and adhesion. It directs signal transduction pathways that regulate these key processes contributing to how cells interact with their external environment. Although Cytohesin 1 can function alone it typically operates as part of protein complexes that include partners like ARNO (another GEF for Arf proteins) that fine-tune intracellular signaling dynamics. This protein also interacts with other signaling molecules through its Sec7 and PH domains expanding its role across various cellular contexts.
Pathways	Cytohesin 1 integrates into significant signaling cascades such as the Arf6 pathway and the phosphoinositide 3-kinase (PI3K) pathway. Through these pathways it compounds cellular responses related to vesicular trafficking and cell morphology adjustments. In the Arf6 pathway Cytohesin 1 acts alongside proteins such as Arf6 and EFA6 to modulate membrane dynamics essential for endocytosis and stress fiber formation. In the PI3K pathway it collaborates with signaling molecules to regulate growth factor-mediated responses highlighting the interconnectivity Cytohesin 1 maintains between various pathway components.
Associated diseases and disorders	Cytohesin 1 has been linked to immune-related diseases and neurological disorders. In the context of the immune system it plays a role in T cell activation and inflammation and alterations in its functioning may contribute to conditions like autoimmunity. In neurological contexts Cytohesin 1 interacts with proteins related to cellular adhesion and neurite outgrowth which can impact neurological functions and may play a role in developmental disorders. Its relationship with proteins like integrins also suggests how its dysregulation can affect cell attachment and signaling impacting disease progression.

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.

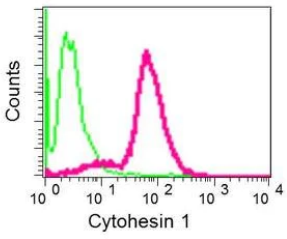
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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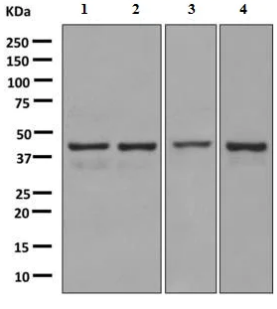
2 product images



Flow Cytometry (Intracellular) - Anti-Cytohesin 1 antibody [EPR10051] - BSA and Azide free (ab249049)

Cytohesin 1 Flow Cytometry (Intracellular) staining using rabbit Anti-Cytohesin 1 antibody

This data was developed using ab151732, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized HUT78 cells labeling Cytohesin 1 using ab151732 at a 1/100 dilution (red) or a rabbit IgG control (negative) (green).



Western blot - Anti-Cytohesin 1 antibody [EPR10051] - BSA and Azide free (ab249049)

Cytohesin 1 Western blot staining using rabbit Anti-Cytohesin 1 antibody

This data was developed using ab151732, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-Cytohesin 1 antibody [EPR10051] (ab151732) at 1/1000 dilution

Lane 1:
Jurkat cell lysates

Lane 2:
Raji cell lysates

Lane 3:
K562 cell lysates

Lane 4:
HUT78 cell lysates

Secondary

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

Predicted band size: 46 kDa

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