

Technical Data Sheet

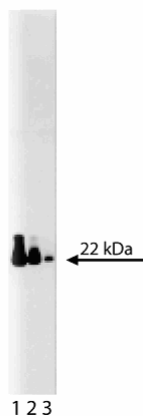
Purified Mouse Anti-CDC42

Product Information

Material Number:	610929
Size:	150 µg
Concentration:	250 µg/ml
Clone:	44/CDC42
Immunogen:	Human CDC42 aa. 1-191
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Rat Tested in Development: Dog, Human, Mouse
Target MW:	22 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Rho family members are small GTP binding proteins that serve as molecular switches for a number of biological processes. They cycle between active GTP-bound and inactive GDP-bound states. CDC42 is a Rho family protein that was identified in membranes of human platelets and placenta. It is the homologue of CDC42Sc, which regulates initiation of bud-site assembly in *Saccharomyces cerevisiae*. CDC42 regulates the function of the mammalian actin cytoskeleton, allowing for efficient cytokinesis and cell morphogenesis. CDC42 and Rac1, a Ras-related GTPase, activate MEKK1, a JNK kinase kinase, which leads to the activation of several downstream components of the MAP kinase cascade leading to activation of PAK65, a CDC42- and Rac-binding protein. PAK65 interacts with CDC42/Rac1, mediates their interaction with MEKK1, and enhances MEKK1 catalytic activity. Chronic activation of CDC42 has been shown to induce malignant cellular transformation. Due to sequence homology among various small GTPase family members, potential cross-reactivity could be observed with this antibody. BD Pharmingen has not performed such cross-reactivity testing.



Western blot analysis of CDC42 on rat brain lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of anti-CDC42 antibody.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20°C.

Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Not Recommended

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml.

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Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
611463	Rat Cerebrum Lysate	500 µg	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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