

Technical Data Sheet

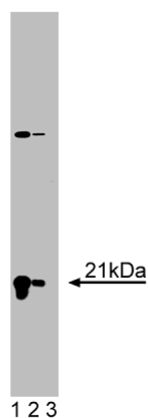
Purified Mouse Anti-Rho

Product Information

Material Number:	610991
Size:	150 µg
Concentration:	250 µg/ml
Clone:	55/Rho
Immunogen:	Human Rho aa. 1-155
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Rat, Mouse
Target MW:	21 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Members of the Ras superfamily of GTPases are distantly related to the heterotrimeric G proteins and shuttle between inactive and active GTP-bound forms. Interconversion between these forms is controlled by guanine nucleotide exchange factors (GEFs) and GTPase-activating proteins (GAPs). The subfamilies of the Ras-like proteins share 30-50% homology, each member participates in a particular set of cellular functions. The Rho (Ras homolog) proteins (A, B, & C) are highly homologous and contain the consensus amino acid sequences necessary for GDP/GTP-binding and GTPase activity. Rho proteins contain a C-terminal sequence, CAAL, whose post-translational modification regulates Rho activation and function. Rho proteins modulate the in vitro activity of PI-3-kinase, PI- 4,5-kinase, and phospholipase D. Rho is a molecular switch that regulates cell morphology and motility in response to extracellular signals. Due to sequence homology among various small GTPase family members, potential cross-reactivity could be observed with this antibody. Based on recent testing in native ELISA with recombinant proteins to CDC42 and Rac1, we have concluded that this antibody recognizes CDC42 and Rac1. BD Pharmingen has not performed such cross-reactivity testing on other family members.



Western blot analysis of Rho on Jurkat lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of anti-Rho.

Preparation and Storage

Store undiluted at -20° C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2008 BD



Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
611451	Jurkat Cell 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/pharming/en/protocols for technical protocols.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. 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.

References

- Brandt D, Gimona M, Hillmann M, Haller H, Mischak H. Protein kinase C induces actin reorganization via a Src- and Rho-dependent pathway. *J Biol Chem.* 2002; 277(23):20903-20910.(Clone-specific: Western blot)
- Madaule P, Axel R. A novel ras-related gene family. *Cell.* 1985; 41(1):31-40.(Biology)
- Maddox AS, Burridge K. RhoA is required for cortical retraction and rigidity during mitotic cell rounding. *J Cell Biol.* 2003; 160(2):255-265.(Clone-specific: Western blot)
- Takai Y, Sasaki T, Tanaka K, Nakanishi H. Rho as a regulator of the cytoskeleton. *Trends Biochem Sci.* 1995; 20(6):227-231.(Biology)
- Wenk MB, Midwood KS, Schwarzbauer JE. Tenascin-C suppresses Rho activation. *J Cell Biol.* 2000; 150(4):913-920.(Clone-specific: Western blot)