

Rhotekin RBD Agarose Beads

CATALOG NUMBER: STA-412

STORAGE: -20°C

QUANTITY AND CONCENTRATION: 800 μ L of 50% Agarose slurry, 400 μ g Rhotekin-RBD in 1X PBS, 50% Glycerol

SHELF LIFE: 1 year from receipt under proper storage conditions; avoid multiple freeze thaw cycles

Background

Small GTP-binding proteins (or GTPases) are a family of proteins that serve as molecular regulators in signaling transduction pathways. Rho, a 21 kDa protein, regulating a variety of biological response pathways that include cell growth, cell transformation and tumor invasion. Like other small GTPases, Rho regulates molecular events by cycling between an inactive GDP-bound form and an active GTP-bound form. In its active (GTP-bound) state, Rho binds specifically to the Rho-binding domain (RBD) of Rhotekin to control downstream signaling cascades.

Presentation

Rhotekin RBD Agarose beads, in color, are easy to visualize, minimizing potential loss during washes and aspirations of Rho-GTP pulldown (Figure 1).



Figure 1: Rhotekin-RBD Beads in Color

Activity

Product specifically interacts and precipitates GTP-bound Rho from cell lysate (Figure 2).

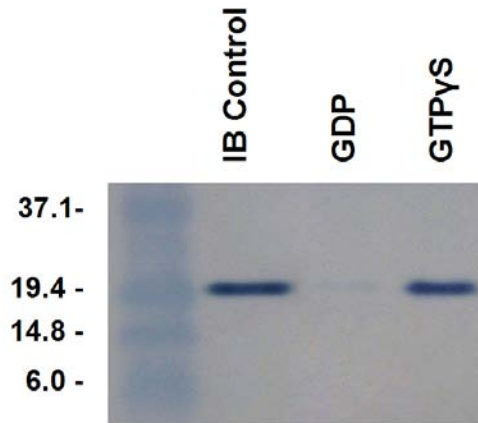


Figure 2: Rho Activation Assay. *Lane 1*, GTPase Immunoblot Positive Control. *Lane 2*, MDA-231 cell lysate loaded with GDP and incubated with Rhotekin RBD Agarose beads. *Lane 3*, MDA-231 cell lysate loaded with GTP γ S and incubated with Rhotekin RBD Agarose beads.

References

1. Ren X.D. and Schwartz M. A. (2000) *Methods Enzymol.* **325**, 264-72.

Recent Product Citations

1. Alam, J. et al. (2014). N-acetylcysteine and the human serum components that inhibit bacterial invasion of gingival epithelial cells prevent experimental periodontitis in mice. *J Periodontal Implant Sci.* **44**:266-273.
2. Sabbatini, M. et al. (2008). Rap1 activation plays a regulatory role in pancreatic amylase secretion. *J. Biol. Chem.* **283**:23884-23894.
3. Sabbatini, M. E. et al. (2010). CCK activates RhoA and Rac1 differentially through G-alpha-13 and G-alpha-q in mouse pancreatic acini. *Am. J. Physiol. Cell Physiol.* **298**:C592-C605.

Warranty

These products are warranted to perform as described in their labeling and in Cell Biolabs literature when used in accordance with their instructions. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THIS EXPRESSED WARRANTY AND CELL BIOLABS DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR PARTICULAR PURPOSE. CELL BIOLABS's sole obligation and purchaser's exclusive remedy for breach of this warranty shall be, at the option of CELL BIOLABS, to repair or replace the products. In no event shall CELL BIOLABS be liable for any proximate, incidental or consequential damages in connection with the products.

This product is for RESEARCH USE ONLY; not for use in diagnostic procedures.

Contact Information

Cell Biolabs, Inc.

7758 Arjons Drive

San Diego, CA 92126

Worldwide: +1 858-271-6500

USA Toll-Free: 1-888-CBL-0505

E-mail: tech@cellbiolabs.com

www.cellbiolabs.com

©2006-2019: Cell Biolabs, Inc. - All rights reserved. No part of these works may be reproduced in any form without permissions in writing.