

Apr 22, 2020

Rab29 fast exchange mutants: characterization of a challenging Rab GTPase

DOI

dx.doi.org/10.17504/protocols.io.bffrjjm6

Rachel C. Gomez¹, Edmundo G. Vides¹, Suzanne R Pfeffer¹

¹Stanford University School of Medicine



Suzanne R Pfeffer

Stanford University School of Medicine

OPEN  ACCESS



DOI: dx.doi.org/10.17504/protocols.io.bffrjjm6

External link: <https://doi.org/10.7554/eLife.79771>

Protocol Citation: Rachel C. Gomez, Edmundo G. Vides, Suzanne R Pfeffer 2020. Rab29 fast exchange mutants: characterization of a challenging Rab GTPase. **protocols.io** <https://dx.doi.org/10.17504/protocols.io.bffrjjm6>

Manuscript citation:

Rab GTPases: Methods and Protocols, Second Edition, Guangpu Li, Editor; Springer

License: This is an open access protocol distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: April 22, 2020

Last Modified: April 22, 2020

Protocol Integer ID: 36049

Keywords: Nucleotide binding, Rab GTPase, fast exchange mutant, Rab29,

Abstract

Rab29 has been implicated in multiple membrane trafficking processes with no described effectors or regulating proteins. Its fast nucleotide exchange rate and inability to bind GDI in cytosol make it a unique and poorly understood Rab. Because the conventional, "GTP-locked" Rab mutation does not have the desired effect in Rab29, we present here the use of a fluorescence-based assay to characterize novel mutants that display faster nucleotide exchange rates, allowing for GEF-independent Rab29 activation.

Attachments



Gomez, Vides and Pfe...

394KB

