

ROK binds to activated RHO1:GTP

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Introduction

Reactome is open-source, open access, manually curated and peer-reviewed pathway database. Pathway annotations are authored by expert biologists, in collaboration with Reactome editorial staff and cross-referenced to many bioinformatics databases. A system of evidence tracking ensures that all assertions are backed up by the primary literature. Reactome is used by clinicians, geneticists, genomics researchers, and molecular biologists to interpret the results of high-throughput experimental studies, by bioinformaticians seeking to develop novel algorithms for mining knowledge from genomic studies, and by systems biologists building predictive models of normal and disease variant pathways.

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Literature references

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- Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics*, 33, 3461-3467. [↗](#)
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Reactome database release: 88

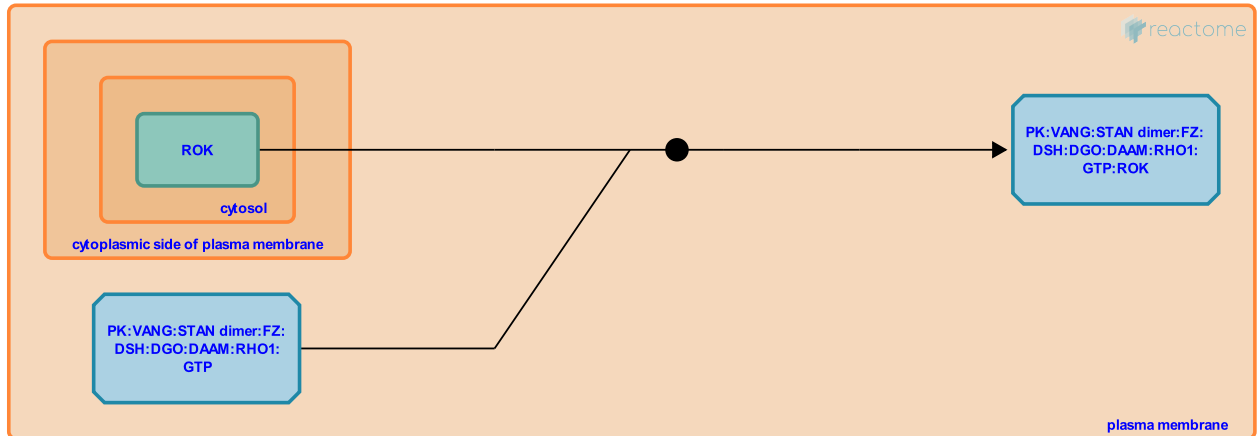
This document contains 1 reaction ([see Table of Contents](#))

ROK binds to activated RHO1:GTP [↗](#)

Stable identifier: R-DME-350388

Type: binding

Compartments: cytosol, plasma membrane



Rho-kinase (ROK) aka Drok binds to activated Rho GTPase (RHO1:GTP) and is itself activated. The conserved Rho-binding site in ROK is the area of interaction.

Literature references

Winter, CG., Axelrod, JD., Ballew, A., Royou, A., Wang, B., Karess, R. et al. (2001). Drosophila Rho-associated kinase (Drok) links Frizzled-mediated planar cell polarity signaling to the actin cytoskeleton. *Cell*, 105, 81-91. [↗](#)

Amano, M., Nishida, Y., Kaibuchi, K., Mizuno, T. (1999). Identification and characterization of Drosophila homolog of Rho-kinase. *Gene*, 238, 437-44. [↗](#)

Editions

2008-05-20	Authored	Williams, MG.
2009-11-19	Reviewed	Axelrod, JD.
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