

# Interaction of PAK-2p34 with RGH10/ PS-GAP results in accumulation of PAK-2p34 in the perinuclear region

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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

Fabregat, A., Sidiropoulos, K., Viteri, G., Forner, O., Marin-Garcia, P., Arnau, V. et al. (2017). Reactome pathway analysis: a high-performance in-memory approach. *BMC bioinformatics*, 18, 142. [↗](#)

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

Fabregat, A., Jupe, S., Matthews, L., Sidiropoulos, K., Gillespie, M., Garapati, P. et al. (2018). The Reactome Pathway Knowledgebase. *Nucleic Acids Res*, 46, D649-D655. [↗](#)

Fabregat, A., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph database: Efficient access to complex pathway data. *PLoS computational biology*, 14, e1005968. [↗](#)

Reactome database release: 88

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

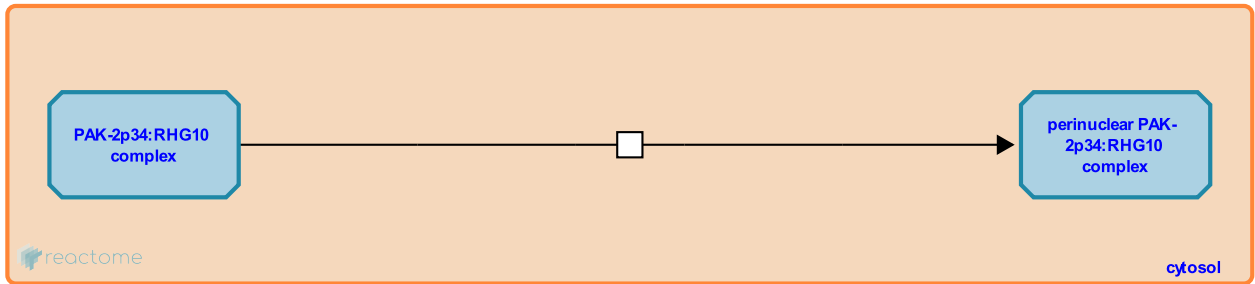
**Interaction of PAK-2p34 with RHG10/ PS-GAP results in accumulation of PAK-2p34 in the perinuclear region** ↗

**Stable identifier:** R-HSA-211731

**Type:** transition

**Compartments:** cytosol

**Inferred from:** [Interaction of PAK-2p34 with PS-GAP results in accumulation of PAK-2p34 in the perinuclear region \(Mus musculus\)](#)



Following caspase mediated cleavage, PAK-2p34 translocates to the nucleus (Jakobi et al., 2003). The interaction with PS-GAP changes the localization of PAK-2p34 from the nucleus to the perinuclear region (Koeppel et al.,2004).

**Literature references**

Jakobi, R., Koeppel, MA., McCarthy, CC., Moertl, E. (2004). Identification and characterization of PS-GAP as a novel regulator of caspase-activated PAK-2. *J Biol Chem*, 279, 53653-64. ↗

**Editions**

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