

# AKT1 E17K mutant phosphorylates RSK

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07/10/2022

## 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.

The development of Reactome is supported by grants from the US National Institutes of Health (P41 HG003751), University of Toronto (CFREF Medicine by Design), European Union (EU STRP, EMI-CD), and the European Molecular Biology Laboratory (EBI Industry program).

## 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. [↗](#)
- 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. [↗](#)
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Reactome database release: 82

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

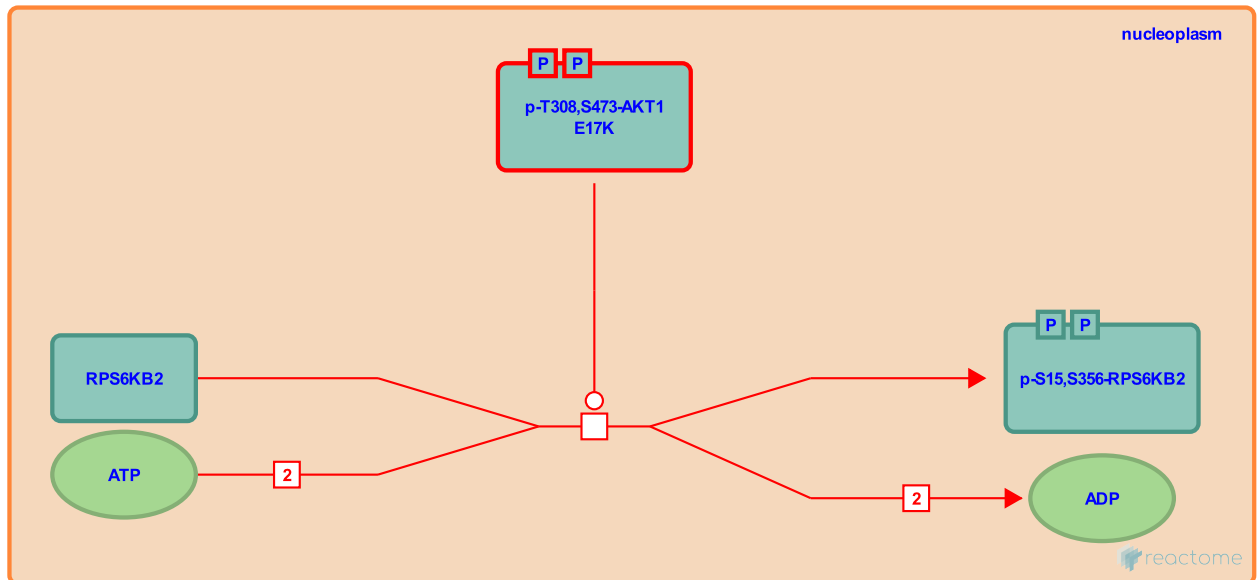
## AKT1 E17K mutant phosphorylates RSK [↗](#)

**Stable identifier:** R-HSA-2399999

**Type:** transition

**Compartments:** nucleoplasm

**Diseases:** cancer



AKT1 E17K gain-of-function mutant is expected to phosphorylate ribosomal protein S6 kinase beta-2, like the wild-type AKT (Koh et al. 1999), but this has not been experimentally tested.

### Literature references

Kim, JW., Kim, J., Lee, B., Chung, J., Koh, H., Kim, D. et al. (1999). Cloning and characterization of a nuclear S6 kinase, S6 kinase-related kinase (SRK); a novel nuclear target of Akt. *Oncogene*, 18, 5115-9. [↗](#)

### Editions

2012-07-18	Authored	Orlic-Milacic, M.
2012-08-03	Edited	Matthews, L.
2012-08-13	Reviewed	Zhao, JJ., Yuzugullu, H., Thorpe, L.