

# AKT phosphorylates IKKalpha

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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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- 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: 81

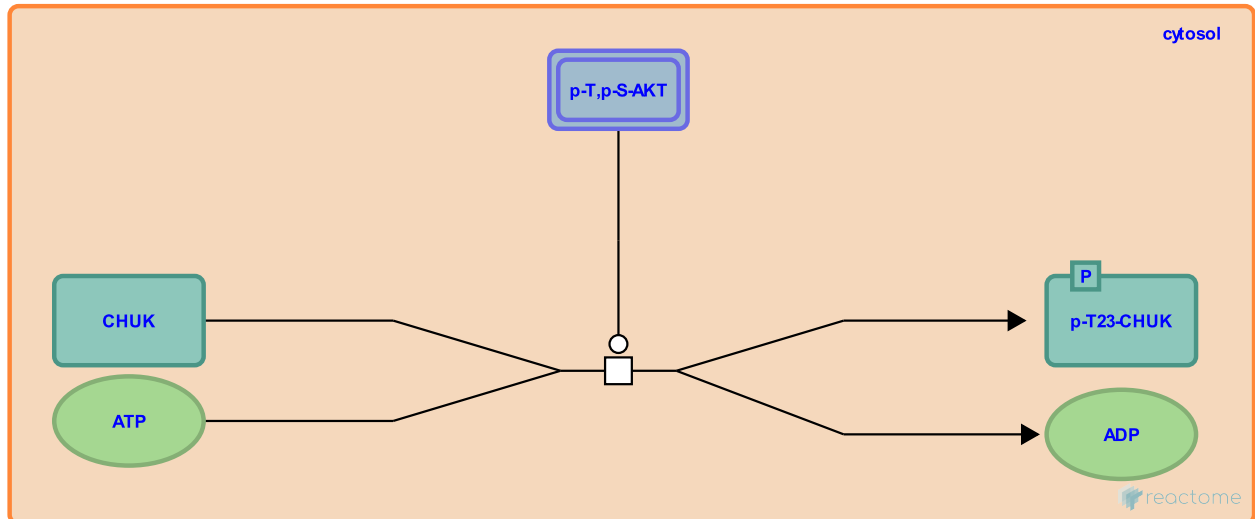
This document contains 1 reaction ([see Table of Contents](#))

## AKT phosphorylates IKKalpha ↗

**Stable identifier:** R-HSA-198611

**Type:** transition

**Compartments:** cytosol



AKT mediates IKKalpha (Inhibitor of nuclear factor kappa B kinase subunit alpha) phosphorylation at threonine 23, which is required for NF-kB activation. NF-kB promoted gene transcription enhances neuronal survival.

### Literature references

Donner, DB., Mayo, LD., Pfeffer, SR., Pfeffer, LM., Ozes, ON., Gustin, JA. (1999). NF-kappaB activation by tumour necrosis factor requires the Akt serine-threonine kinase. *Nature*, 401, 82-5. ↗

### Editions

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