

# Dimerization of LIMK1 by Hsp90

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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., 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: 88

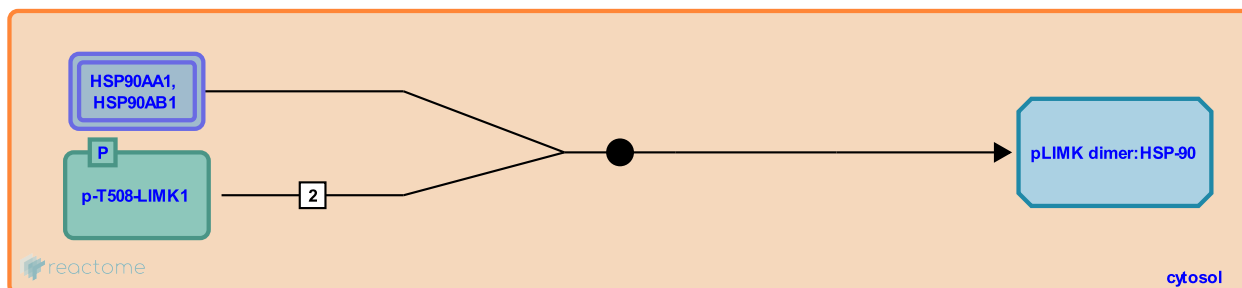
This document contains 1 reaction ([see Table of Contents](#))

## Dimerization of LIMK1 by Hsp90 [↗](#)

**Stable identifier:** R-HSA-419645

**Type:** binding

**Compartments:** cytosol



After phosphorylation on Thr 508, LIMK undergoes homodimerization. Homodimer formation is promoted by the binding of heat shock protein 90 (Hsp90) to a short sequence in the kinase domain of LIMKs. LIMKs are further phosphorylated after homodimer formation and transphosphorylation of the kinase domain.

### Literature references

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### Editions

2009-03-23	Authored, Edited	Garapati, P V.
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