

# Auto-ubiquitination of TRAF3 within activated TLR3 complex

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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. [↗](#)
- 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: 82

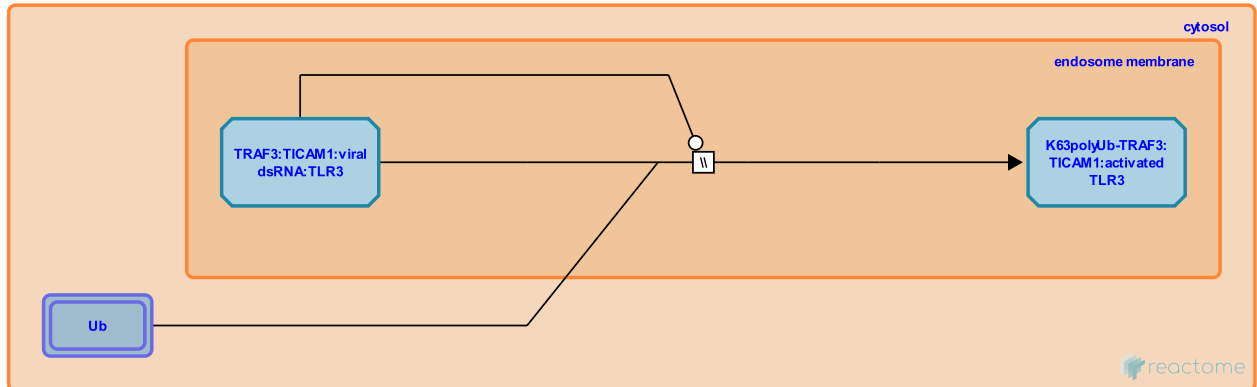
This document contains 1 reaction ([see Table of Contents](#))

## Auto-ubiquitination of TRAF3 within activated TLR3 complex [↗](#)

**Stable identifier:** R-HSA-9013974

**Type:** omitted

**Compartments:** endosome membrane, cytosol



TRIF(TICAM1) signaling activates TRAF3 self-mediated polyubiquitination through Lys-63 of ubiquitin. The ubiquitinated TRAF3 in turn activates the interferon response (Tseng PH et al. 2010).

### Literature references

Mino, T., Matsuzawa, A., Karin, M., Zhang, W., Tseng, PH., Vignali, DA. (2010). Different modes of ubiquitination of the adaptor TRAF3 selectively activate the expression of type I interferons and proinflammatory cytokines. *Nat Immunol*, 11, 70-5. [↗](#)

### Editions

2012-04-26	Authored	Shamovsky, V.
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