

# viral dsRNA binds the toll-like receptor 3 (TLR3)

D'Eustachio, P., Shamovsky, V.

European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

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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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Reactome database release: 83

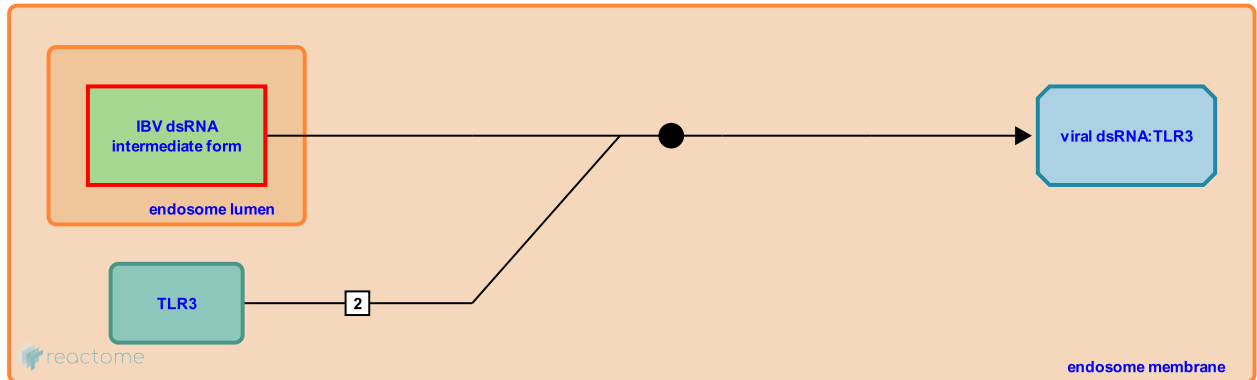
This document contains 1 reaction ([see Table of Contents](#))

## viral dsRNA binds the toll-like receptor 3 (TLR3) [↗](#)

**Stable identifier:** R-GGA-434004

**Type:** binding

**Compartments:** endosome membrane, endosome



Viral dsRNA triggers an antiviral pathway mediated by toll like receptor 3. TLR3 dimerization occurs upon ligand binding to positively charged residues on the ectodomain termini of TLR3 which are responsible for the interaction with sugar-phosphate groups of dsRNA.

### Literature references

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### Editions

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