

# viral dsRNA:IFIH1, viral dsRNA:K- 63polyUb-DDX58 bind MAVS

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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: 75

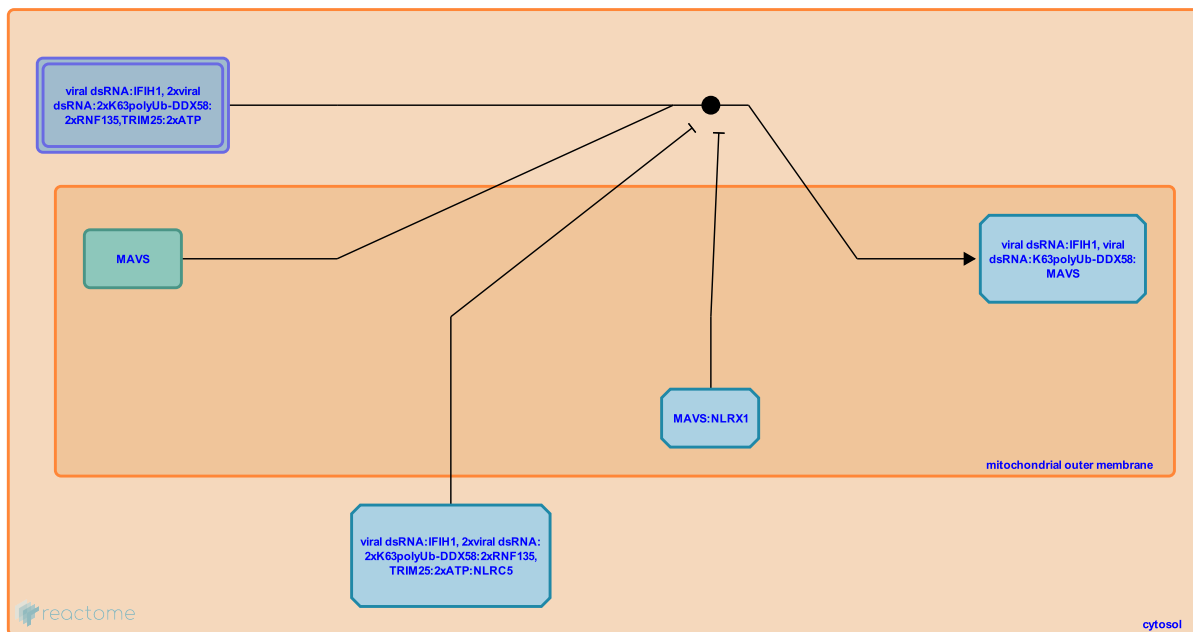
This document contains 1 reaction ([see Table of Contents](#))

## viral dsRNA:IFIH1, viral dsRNA:K63polyUb-DDX58 bind MAVS ↗

**Stable identifier:** R-HSA-168909

**Type:** binding

**Compartments:** cytosol, mitochondrial outer membrane



Upon binding viral dsRNA, Probable ATP-dependent RNA helicase DDX58 (DDX58, RIG-I, RIG-1) and Interferon-induced helicase C domain-containing protein 1 (IFIH1, MDA5) recruit the downstream signal transducer Mitochondrial antiviral-signaling protein (MAVS, IPS-1). This mitochondria-bound adaptor has an N-terminal CARD-like domain (CLD) which associates with the CARD regions of DDX58 and IFIH1 to mediate induction of interferons.

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### Editions

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