

Dimerized Phospho-IRF3 is Transported To The Nucleus

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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: 88

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

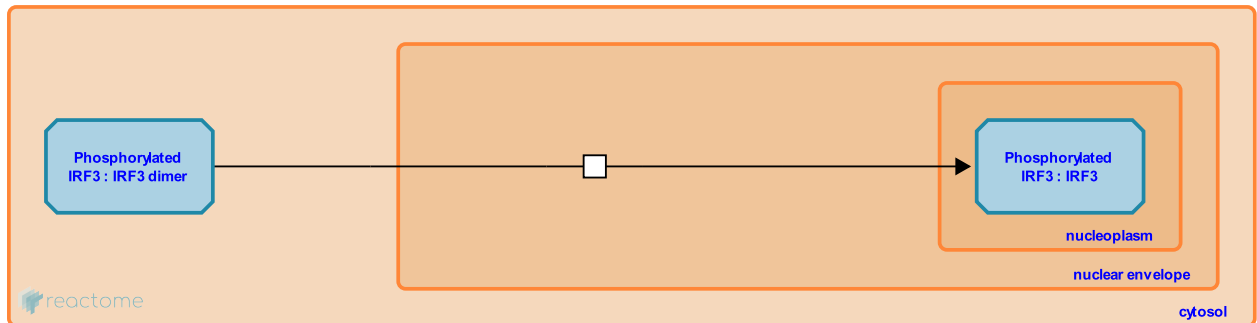
Dimerized Phospho-IRF3 is Transported To The Nucleus ↗

Stable identifier: R-GGA-433967

Type: transition

Compartments: cytosol, nucleoplasm, nuclear envelope

Inferred from: [Dimerized phospho-IRF3/IRF7 is transported to the nucleus \(Homo sapiens\)](#)



Phosphorylation and dimerization of IRF3 results in the cytoplasm-to-nucleus translocation of IRF-3, DNA binding, and increased transcriptional activation.

Literature references

Maniatis, T., Golenbock, DT., McWhirter, SM., Latz, E., Rowe, DC., Liao, SM. et al. (2003). IKKepsilon and TBK1 are essential components of the IRF3 signaling pathway. *Nat Immunol*, 4, 491-6. ↗

Editions

2009-08-27	Authored	Shamovsky, V.
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