

# IGF2BP1 binds MAPK4 mRNA

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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: 76

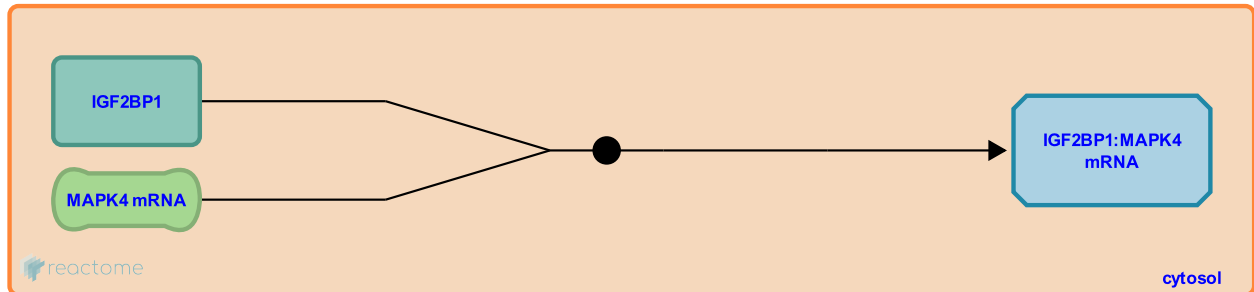
This document contains 1 reaction ([see Table of Contents](#))

## IGF2BP1 binds MAPK4 mRNA [↗](#)

**Stable identifier:** R-HSA-5687079

**Type:** binding

**Compartments:** cytosol



IGF2BP1 is a cytosolic RNA-binding protein that recruits target transcripts to RNP particles for storage or transport. These RNP particles also restrict access of the translational machinery and micro-RNAs to the transcript and in this way affect rates of protein translation (reviewed in Bell et al, 2013). IGF2BP1 binds to the 3' UTR of MAPK4 mRNA and inhibits its translation. This antagonizes MAPKAPK5 activation and HSP1 phosphorylation and in this manner affects F-actin rearrangements and cell motility (Stohr et al, 2012; Kostenko et al, 2009a; reviewed in Kostenko et al, 2012).

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### Editions

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