MAPK4,6 translocate to the cytoplasm

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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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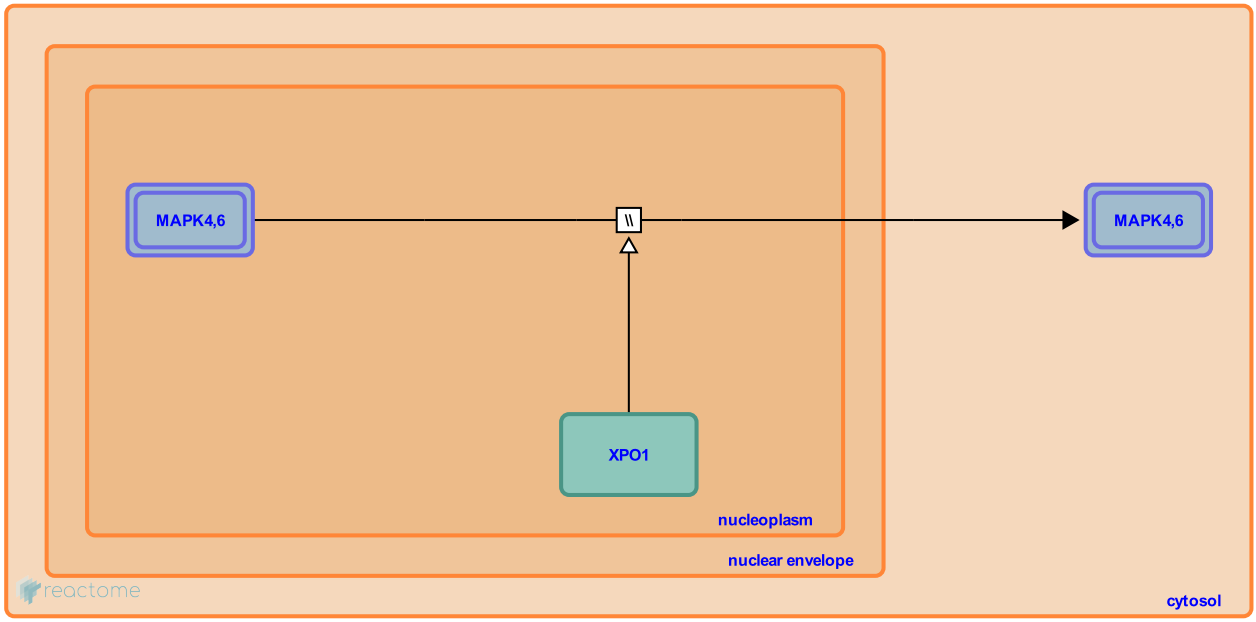
Stable identifier: R-HSA-5687109

Type: omitted

Compartments: nucleoplasm



Despite differences in their overall cellular distribution (MAPK6 is found in both the nucleus and the cytosol, while MAPK4 is predominantly found in the cytosol), both MAPK4 and 6 shuttle between the cytosol and the nucleus. Nuclear import of both proteins occurs through an active temperature sensitive pathway, while nuclear export depends on XPO1 (Aberg et al, 2006; Julien et al, 2003).

Literature references

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