BMT2 (SAMTOR) binds S-adenosylmethionine and dissociates from KICSTOR:GATOR1

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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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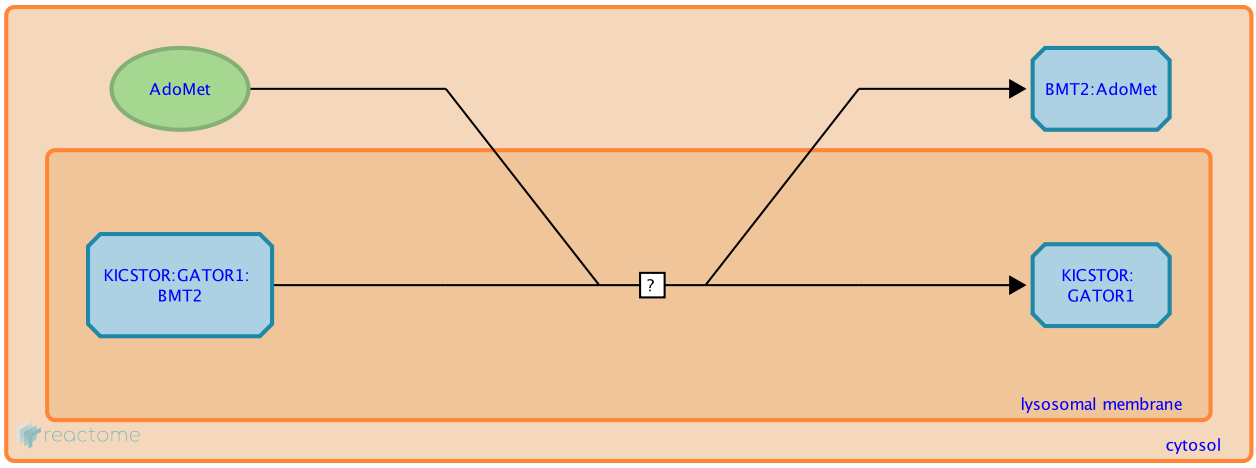
Stable identifier: R-HSA-9640254

Type: uncertain

Compartments: lysosomal membrane



BMT2 (SAMTOR) binds GATOR1 and acts upstream of GATOR1 and KICSTOR to inhibit mTORC1 activation (Gu et al. 2017). Upon binding S-adenosymethionine, a metabolic derivative of the amino acid methionine, SAMTOR dissociates from GATOR1 and mTORC1 activity is increased through an uncharacterized mechanism (Gu et al. 2017). GATOR1 is recruited to the lysosomal membrane by the KICSTOR complex (Wolfson et al. 2017).

Literature references

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Editions

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