reactome

Adenylate Kinase 3 is a GTP-AMP phospho-transferase

Akkerman, JW., Jupe, S., Ouwehand, WH.

European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

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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

Fabregat, A., Sidiropoulos, K., Viteri, G., Forner, O., Marin-Garcia, P., Arnau, V. et al. (2017). Reactome pathway analysis: a high-performance in-memory approach. *BMC bioinformatics, 18*, 142. ↗

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. ↗

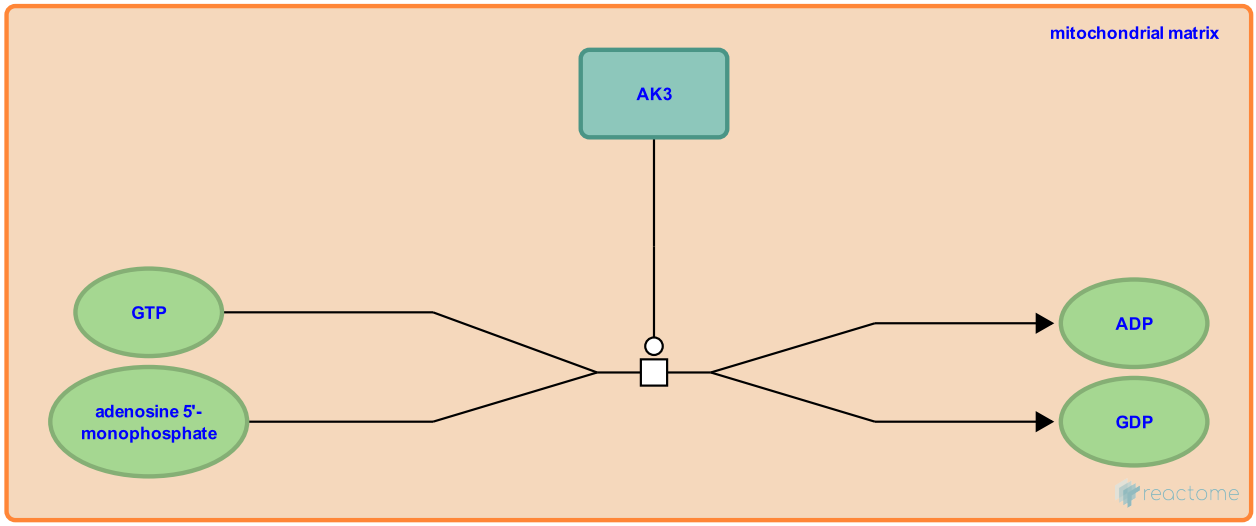
Fabregat, A., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph database: Efficient access to complex pathway data. *PLoS computational biology, 14*, e1005968. ↗

Adenylate Kinase 3 is a GTP-AMP phosphotransferase ↗

Stable identifier: R-HSA-1008248

Type: transition

Compartments: mitochondrial matrix



GTP-AMP phosphotransferase, also called Adenylate kinase 3 catalyzes phosphate transfer from GTP to AMP (EC 2.7.4.10). A crystal structure is available (Choe et al. 2005).

Literature references

Tomasselli, AG., Noda, LH. (1979). Mitochondrial GTP-AMP phosphotransferase. 2. Kinetic and equilibrium dialysis studies. *Eur J Biochem, 93*, 263-7. ↗

Editions

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