

AMP + H₂O => adenosine + orthophosphate [NT5C1B]

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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: 74

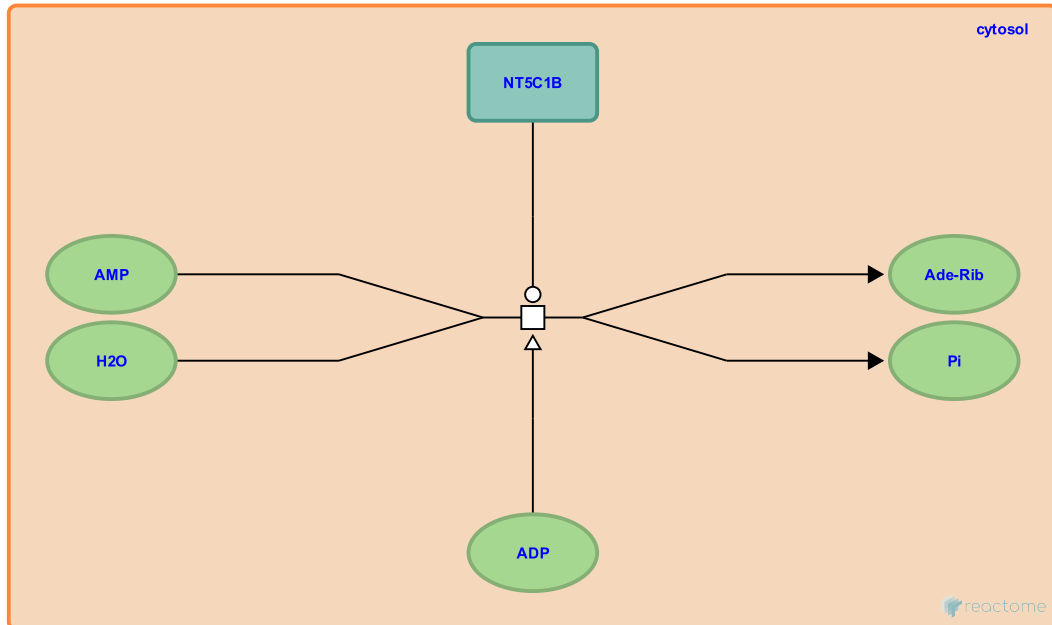
This document contains 1 reaction ([see Table of Contents](#))

AMP + H₂O => adenosine + orthophosphate [NT5C1B] ↗

Stable identifier: R-HSA-109415

Type: transition

Compartments: cytosol



5'-nucleotidase cytosolic IB catalyzes the hydrolysis of AMP to yield adenosine and orthophosphate. The human enzyme has been identified as the product of a recombinant DNA clone, but its biochemical properties are largely inferred from those of the better studied mouse and rat enzymes (Sala-Newby and Newby 2001; Sala-Newby et al. 2003).

Literature references

Sala-Newby, GB., Freeman, NV., Curto, MA., Newby, AC. (2003). Metabolic and functional consequences of cytosolic 5'-nucleotidase-IA overexpression in neonatal rat cardiomyocytes. *Am J Physiol Heart Circ Physiol*, 285, H991-H998. ↗

Sala-Newby, GB., Newby, AC. (2001). Cloning of a mouse cytosolic 5'-nucleotidase-I identifies a new gene related to human autoimmune infertility-related protein. *Biochim Biophys Acta*, 1521, 12-18. ↗

Editions

2010-02-06

Revised

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