creatine + ATP => phosphocreatine + ADP [CKB,CKM]

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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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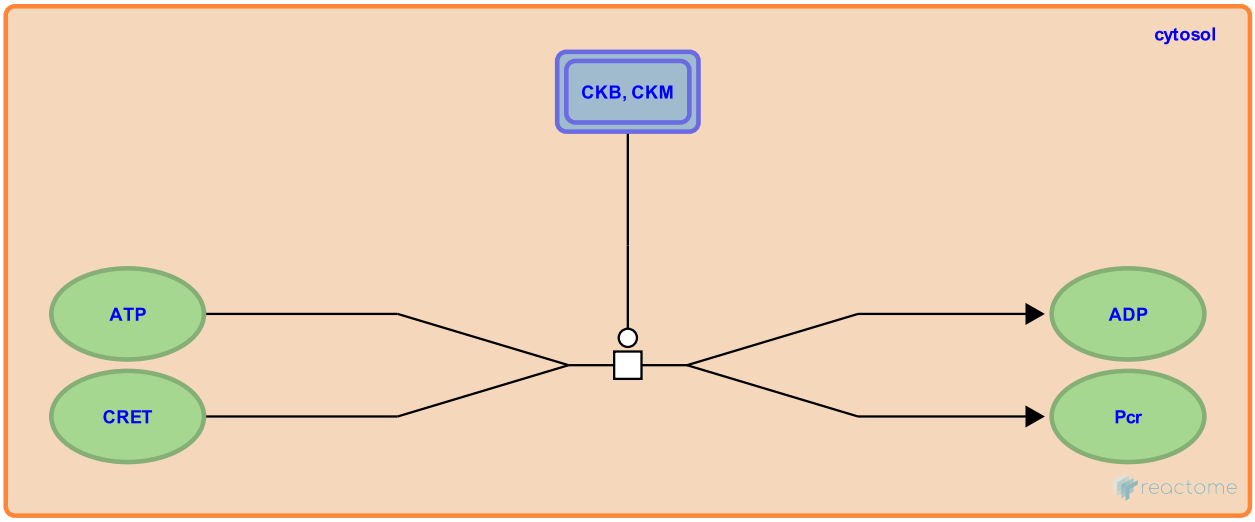
Stable identifier: R-HSA-200318

Type: transition

Compartments: cytosol



Cytosolic creatine kinase catalyzes the reaction of creatine and ATP to form phosphocreatine and ADP. The active form of the enzyme is a dimer. Monomers of the cytosolic enzyme occur in two isoforms, B and M, so called because of their abundance in brain and muscle respectively. The enzyme is widely expressed in the body and many tissues express both isoforms. Both homo- (BB, MM) and heterodimers (BM) are catalytically active.

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Editions

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