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ProductInformation

Myokinase
from rabbit muscle

Product Number **M 3003**
Storage Temperature 2-8 °C

Product Description

Enzyme Commission (EC) Number: 2.7.4.3
CAS Number: 9013-02-9
Molecular Weight: 21 kDa[1]
Extinction Coefficient: $E^{1\%}$ = 5.3 (280 nm)[1]
pI: 6.1[1]

Myokinase is a key enzyme involved with adenine nucleotide metabolism. The action of myokinase insures that the adenine nucleotides (ATP, ADP, and AMP) are maintained in equilibrium in the cytosol. Myokinase catalyzes the following reaction:

$$ADP + ADP \rightarrow ATP + AMP$$

Reported K_M values are: ATP (0.3 mM), AMP (0.5 mM), and ADP (1.58 mM).[2] Bivalent metals are required for activity. The order of reactivity is $Mg^{2+} > Ca^{2+} > Mn^{2+} > Ba^{2+}$. Myokinase is inhibited by $AgNO_3$, $CuSO_4$, zinc acetate, and p-chloromercuribenzoate.[3]

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Storage/Stability

This product is offered as an ammonium sulfate suspension of myokinase. It is not recommended that dilute solutions be stored as stock solutions.

References

1. Boyer, P.D., The Enzymes, Academic Press (New York, NY), 3rd ed., **8**, 279-305 (1973).
2. Methods of Enzymatic Analysis, 2nd ed., **1**, Bergmyer, H.U., Ed., Academic Press (New York, NY), pp. 486-487 (1974).
3. Noda, L., and Kuby, S.A., Myokinase, ATP-AMP Transphosphorylase. Meth. Enzymol., **6**, 223-230 (1962).

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