Enolase from baker’s yeast (S. cerevisiae)

Product Number E 6126
Storage Temperature -0 °C

Product Description
Enzyme Commission (EC) Number: 4.2.1.11
CAS Number: 9014-08-8
Molecular Weight: 93.069 kDa
Extinction Coefficient: $E_{1\%}^{1\text{cm}} = 8.95$ (280 nm)
pl: 6.1
Synonyms: Phosphopyruvate hydratase, 2-Phospho-D-glycerate hydrolase

Enolase from baker’s yeast is a homodimer containing two bound Mg ions and has a Stoke’s radius of 36.2 Å. The peptide consists of 436 amino acids and contains a single cysteine residue. Two of the active site components include His and Arg. Yeast enolase contains a phosphorylated tyrosine residue and has been reported to be a substrate for phosphorylation by tyrosine protein kinase.

Enolase catalyzes the following reaction:

$$2\text{-Phospho-D-glycerate} \rightarrow \text{phosphoenolpyruvate} + \text{H}_{2}\text{O}$$

Reported $K_m$ values are 0.07 mM for 2-Phospho-D-glycerate and 0.09 mM for phosphoenolpyruvate.

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

Preparation Instructions
This enzyme is soluble in 15 mM Tris HCl, pH 7.4, (1 mg/ml), yielding a clear solution.

References

TMG/RXR 12/02