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Product Information

β -Galactose Dehydrogenase from *Pseudomonas fluorescens*

Product Number **G 6637**
Storage Temperature 2-8 °C

Product Description

Enzyme Commission (EC) Number: 1.1.1.48
CAS Number: 9028-54-0
Molecular Weight: approximately 100 kDa.
pI: 4.28

This product is considered to be a crude preparation. A general outline of the method of isolation is the following: extraction from acetone powder, a pH adjustment step, a heating step, a second pH adjustment, a desalting step, and calcium phosphate gel purification. This product is lyophilized from a final buffer of 0.2 M potassium phosphate.¹

This enzyme is used to convert D-galactose to D-galactono-1,4-lactone, an oxidizing reaction. This product has activity in the alkaline pH range, which depends somewhat on the buffer used. In bis(hydroxyethyl)amine, the optimal pH is 9.1-9.5. In Tris HCl, the optimum is pH 8.0-9.0. In pyrophosphate, the optimum is pH 8.6. In phosphate buffer, the optimum is pH 8.0-9.0 and the enzyme retains 90% of optimal activity at pH 7.5.²

Precautions and Disclaimer

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

Preparation Instructions

This product is soluble in water (5 mg/ml).

References

1. Tabor, H., and Tabor, C.W., Methods in Enzymology, **17A**, 900-911, 1970.
2. Methods of Enzymatic Analysis, 3rd Ed., Vol. 2, Bergmeyer, H.U., et al., Eds., Verlag Chemie GmbH (New York, NY: 1983), pp. 193-194.

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