Vol. 65, 2000

Rob Schoevaart, Fred van Rantwijk, and Roger A. Sheldon*. A Four-Step Enzymatic Cascade for the One-Pot Synthesis of Non-natural Carbohydrates from Glycerol

Pages 6941 and 6942. Figures 3–6 have been printed without the captions of the vertical axes. The corrected Figures are shown below.

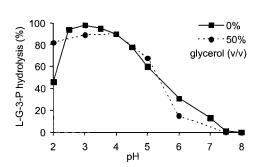


Figure 3. Hydrolysis of L-glycerol-3-phosphate (L-G-3-P) (initial concentration 50 mM) after 2 h incubation at room temperature catalyzed by phytase (1 mg/ml) in 0 and 50% glycerol (v/v) at different pH.

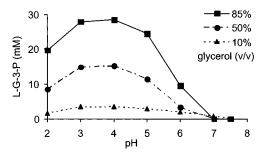


Figure 4. Production of L-glycerol-3-phosphate by phytase (1 mg/ml) in 10, 50, and 85% glycerol (v/v) at different pH after 2.5 h incubation with 150 mM pyrophosphate. Presumably an equal amount of D-glycerol-3-phosphate is formed.

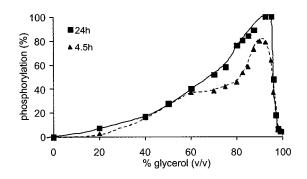


Figure 5. Phosphorylation of glycerol with pyrophosphate (150 mM) by phytase (1 mg/ml) at pH 4.0 at 37 °C in glycerol/water (v/v) mixtures. Racemic glycerol-3-phosphate is obtained in 100% yield (based on pyrophosphate) in 95% glycerol after 24 h.

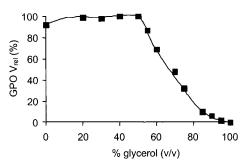


Figure 6. Oxidation of L-glycerol-3-phosphate to DHAP by GPO in varying concentrations of glycerol at pH 7.5. Conversion was measured after 1 h. Reaction rates were expressed relative to the highest rate obtained at 55% glycerol (v/v). JO004037D

10.1021/jo004037d Published on Web 12/12/2000