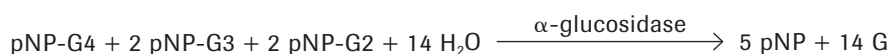
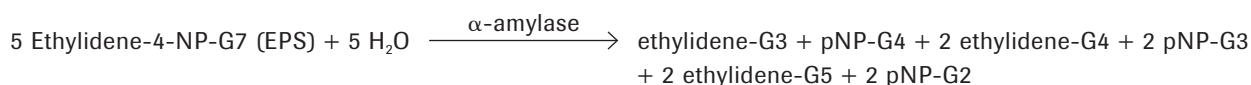


α-Amylase

Test principle: Enzymatic colorimetric



This test is an enzymatic colorimetric assay according to IFCC. Defined oligosaccharides such as 4,6-ethylidene-(G7) p-nitrophenyl-(G1)-a, D-maltoheptaoside (ethylidene-G7PNP) are cleaved under the catalytic action of α-amylases. The G2PNP, G3PNP, and G4PNP fragments formed are completely hydrolyzed to p-nitrophenol and glucose by α-glucosidase.

The color intensity of the p-nitrophenol is directly proportional to the α-amylase activity. It is determined by measuring the increase in absorbance at 409 nm.

Proposed reagent composition

approximately 5+1 formulation

Reagent 1

Composition	Concentration	Catalog Number
Buffer (HEPES, pH 7.0)	52.4 mmol/l	10 172 944 103
NaCl	87 mmol/l	
MgCl ₂	12.6 mmol/l	
CaCl ₂	0.075 mmol/l	
α-Glucosidase	>4 kU/l	11 626 329 103
Detergent, preservative, such as Polidocanol		10 831 620 103
MIT		11 085 905 103

Reagent 2

Composition	Concentration	Catalog Number
Buffer (HEPES, pH 7.0)	52.4 mmol/l	10 172 944 103
Ethylidene-4-NP-G7 (EPS)	22 mmol/l	10 880 078 103
Detergent, preservative, such as Polidocanol		10 831 620 103
MIT		11 085 905 103

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Published by

Roche Diagnostics GmbH

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Germany

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05837715990 ② 0311