

ISOAMYLASE (Glycogen 6-glucohydrolase) (*Flavobacterium odoratum*)

08/23

Non-recombinant; Crystalline suspension. Purity (activity) ~ 100%.

E-ISAMYFO-800U

EC: 3.2.1.68

Synonyms: isoamylase; glycogen 6- α -D-glucohydrolase

CAZy Family: GH13

CAS: 9067-73-6

Refer to the product lot number Certificate of Analysis for lot specific properties.

PROPERTIES

1. ELECTROPHORETIC PURITY:

- Single major band on SDS-gel electrophoresis (MW = 83,000) with some minor bands
- Single major band on isoelectric focusing (pI = 8.8)

2. SPECIFICITY:

Hydrolysis of (1,6)- α -D-glucosidic branch linkages in glycogen, amylopectin and their β -limit dextrins.

3. PHYSICOCHEMICAL PROPERTIES:

Recommended conditions of use are at pH 6.0 in the presence of 1 mM CaCl₂ and at up to 40°C.

pH Optima (in presence of 1 mM calcium): 4.5-6.5

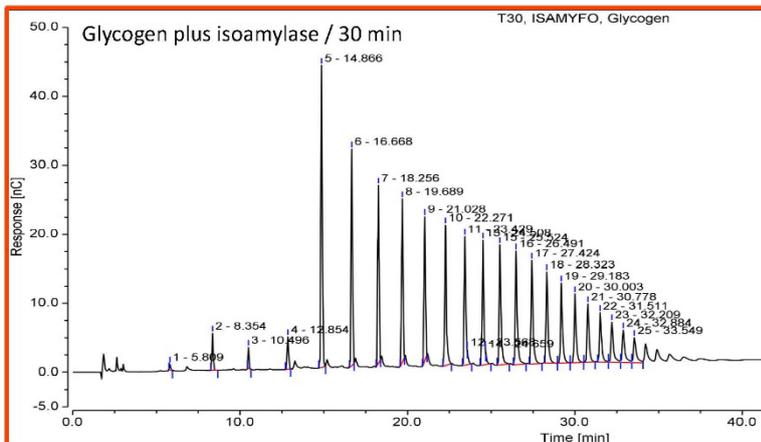
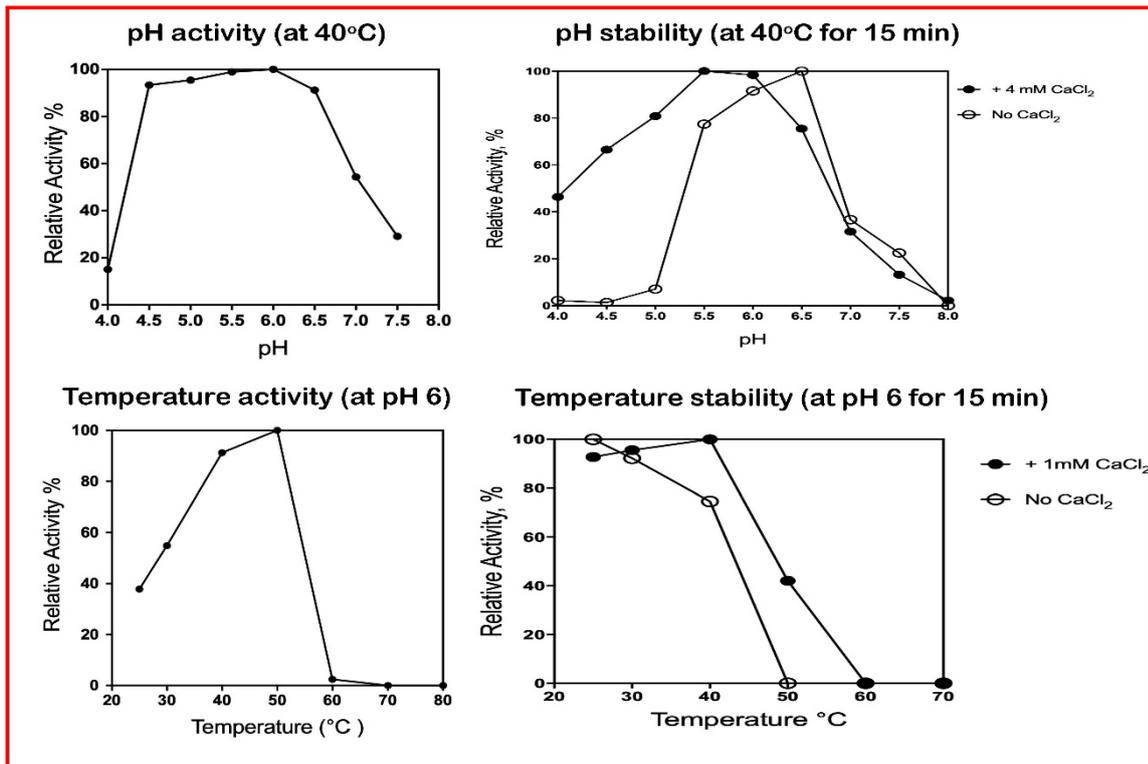
pH Stability (in presence of 1 mM calcium): 3.5-6.0 (16 h, 4°C)

Temperature Optima (in presence of 1 mM CaCl₂): 50°C (assayed at pH 6 for 10 min)

Temperature Stability (in presence of 1 mM CaCl₂): < 50°C (incubated at pH 6 for 15 min)

4. PRODUCT DETAILS:

The enzyme is supplied as a crystalline suspension at ~ 200 U/mL in 3.2 M ammonium sulphate solution containing 0.02% sodium azide. Store at 4°C. Swirl to mix the enzyme before dispensing.



INCUBATION CONDITIONS:

Oyster liver glycogen (20 mL, 5 mg/mL) in MES buffer (100 mM, pH 6) containing CaCl₂ (1 mM) incubated with 20 U of **E-ISAMYFO** at 40°C for either 30 or 240 min. Reaction terminated by heating the reaction solution in a boiling water bath for 5 min. Sample filtered and analysed using HPAEC-PAD (Dionex ICS5000 + DP system and Chromeleon 7 software) with CarboPac PA200 guard and analytical columns DIONEX ion chromatography.