

Fructosyl-peptide oxidase

ORIGIN: RECOMBINANT *E. COLI*

CAT#: FRU-70-1341

EC#: 1.5.3

SPECIFICATIONS

Appearance: Yellow lyophilizate

Activity: ≥ 6.0 U/mg lyophilizate

ASSAY PRINCIPLE



The appearance of quinoneimine dye is measured spectrophotometrically at 555 nm.

APPLICATION

The enzyme is useful for the determination of fructosyl-peptide and fructosyl-L-amino acid.

UNIT DEFINITION

One unit (U) is defined as the amount of enzyme which produces 1 μmol of hydrogen peroxide per min at 37°C and pH 8.0 under the assay conditions.

CHARACTERISTICS

Molecular weight: ca. 60 kDa (gel filtration)

Structure: monomer of 52 kDa (SDS-PAGE)

Michaelis constant: 3.4×10^{-3} M (fructosyl-valyl-histidine)

4.4×10^{-3} M (fructosyl-glycine)

8.9×10^{-3} M (N^ϵ -fructosyl-lysine)

pH Optimum: 7.5–8.0

pH Stability: 6.0–9.5

Optimum temperature: 35–42°C

Thermal stability: below 45°C

Stabilizers: Sodium glutamate, EDTA

Specificity: fructosyl-valyl-histidine (100), fructosyl-glycine (53)

N^ϵ -fructosyl-lysine (84)

Fructosyl-peptide oxidase

Figure -1 pH Optimum

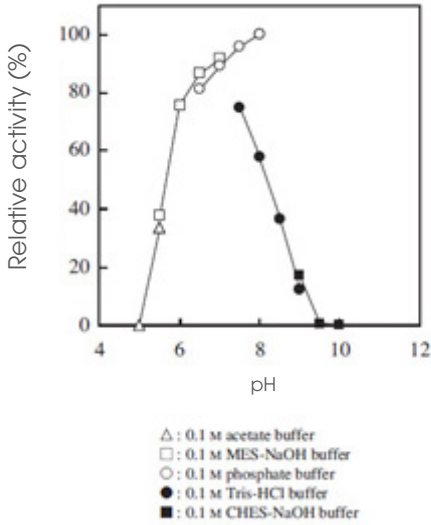


Figure -2 pH Stability

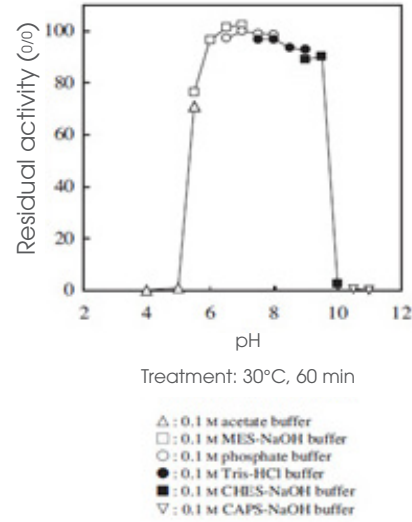


Figure -3 Optimum temperature

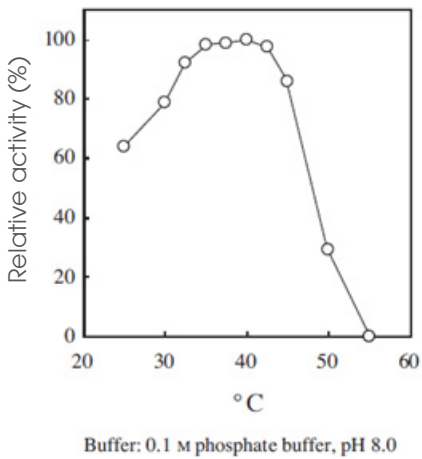
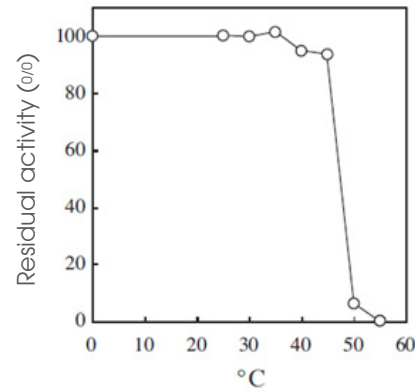


Figure -4 Thermal stability



THE AMERICAS

SEKISUI Diagnostics, LLC
 One Wall Street
 Burlington, MA 01803
 Phone: 800 332 1042
 Fax: 800 762 6311

info@sekisui-dx.com
 sekisuidiagnostics.com

INTERNATIONAL

SEKISUI Diagnostics (UK) Limited
 Liphook Way, Allington
 Maidstone, Kent, ME16 0LQ, UK
 Phone: +44 1622 607800
 Fax: +44 1622 607801



Because every result matters™