

ENZYMES

BY

SORACHIM

Invertase from Candida sp.

IVH-101

SPECIFICATIONS

Product name	β -D-fructofuranoside fructohydrolase
EC	3.2.1.26
Appearance	White amorphous powder lyophilized
Activity	Grade I, 100 U/mg-solid or more (containing approx. 70% of stabilizers)
Stabilizers	KH_2PO_4
Stability	Stable at - 20°C for at least 12 months
Molecular weight	approx. 260,000
Michaelis constant	$1.5 \times 10^{-2}\text{M}$ (Saccharose)
Structure	Glycoprotein containing ca. 50% of carbohydrates
Optimum pH	3.5 - 4.0
Optimum temperature	60 - 70°C
pH Stability	pH 4.0 - 6.0 (50°C, 10min)
Thermal stability	below 60°C (pH 4.5, 10min)
Substrate specificity	The enzyme hydrolyzes saccharose and raffinose, but does not hydrolyze inulin and melezitose.

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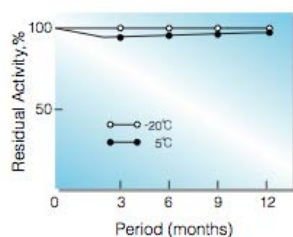


Fig.1. Stability (Powder form)
(kept under dry conditions)

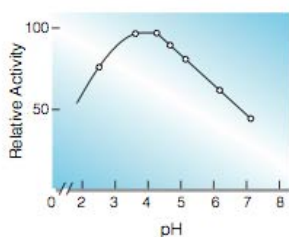


Fig.2. pH-Activity

[20°C, 3min-reaction in the following
buffer solution: pH2~3, 0.1M glycine-
HCl; pH4~5, 50mM acetate ;
pH6~7, 50mM phosphate]

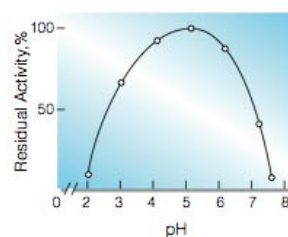


Fig.4. pH-Stability

[50°C, 10min-treatment with
the following buffer solution:
pH2~3, 0.1M glycine-HCl;
pH4~5, 50mM acetate;
pH6~8, 50mM phosphate]

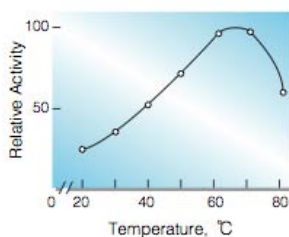


Fig.3. Temperature activity

[3min-reaction in 50mM acetate buffer,
pH4.5]

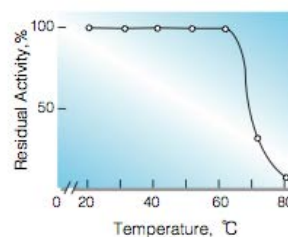


Fig.5. Thermal stability

[10min-treatment with 50mM acetate
buffer, pH4.5]