



SUCRASE (MALTASE) From Yeast (Lot 20401)

E-SUCR

06/03

PROPERTIES

1. ELECTROPHORETIC PURITY

- Single major band on SDS-gel electrophoresis (62,000)
- Single major band on isoelectric focusing (pI = 5.7).

2. SPECIFIC ACTIVITY AND LEVEL OF OTHER ACTIVITIES

SUBSTRATE	ENZYME MEASURED	SPECIFIC ACTIVITY (U/mg protein)
Sucrose	-Glucosidase	22.0
Kestose & Kestotetraose	-Glucosidase	< 0.005
<i>p</i> -NP- -Glucoside	-Glucosidase	222
<i>p</i> -NP- -Glucosidase	-Glucosidase	< 0.001
<i>p</i> -NP- -Galactoside	-Galactosidase	< 0.001
<i>p</i> -NP- -Galactoside	-Galactosidase	< 0.001
Blocked <i>p</i> -NP-Maltoheptoaside	-Amylase	< 0.001

This enzyme specifically hydrolyses sucrose in the presence of fructo-oligosaccharides.

All activities were measured at pH 6.8 and 40°C. Action on sucrose was measured as glucose release, using glucose oxidase/peroxidase reagent. One Unit of enzyme activity is the amount of enzyme required to release one micromole of glucose/min from sucrose (10 mM) at pH 6.8 and 40°C. Other glycosidase activities were measured using the appropriate *p*-nitrophenyl glycoside (at 10 mM). One Unit of enzyme activity is the amount of enzyme required to release one micromole of *p*-nitrophenol/min from the appropriate substrate at pH 6.8 and 40°C.

-Amylase was measured using the "CERALPHA" -amylase assay method.

3. PHYSICOCHEMICAL PROPERTIES

pH optima 6.4-6.8

Temperature Optima 40°C

pH Stability 5.6-7.

Temperature Stability <40°C

4. STORAGE CONDITIONS

The enzyme is supplied as a lyophilised powder and should be stored at -20°C. On dissolution in buffer or water, the enzyme should be stored in the frozen state. **It is recommended** that all buffers used for dilution contain BSA (0.5 mg/ml).