



MALTASE (α -Glucosidase) from Yeast (Lot 130302)

E-MALTS

07/15

(EC 3.2.1.20) alpha-D-glucoside glucohydrolase

PROPERTIES

1. ELECTROPHORETIC PURITY:

- Single major band on SDS-gel electrophoresis (52,000)
- 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)
<i>p</i> -NP- α -Glucoside	α -Glucosidase	123.0
Maltose	α -Glucosidase	20.3
Sucrose	α -Glucosidase	21.4
<i>p</i> -NP- β -Glucosidase	β -Glucosidase	< 0.001
<i>p</i> -NP- α -Galactoside	β -Galactosidase	< 0.001
<i>p</i> -NP- β -Galactoside	β -Galactosidase	< 0.001
Blocked <i>p</i> -NP-Maltoheptoaside	α -Amylase	< 0.001

All activities were measured at pH 6.8 and 40°C. Glycosidase activities were measured using the appropriate *p*-nitrophenyl glycoside (at 10 mM). α -Amylase was measured using the "CERALPHA" α -amylase assay reagent. One Unit of enzyme activity is the amount of enzyme required to release one μ mole of *p*-nitrophenol per min from the appropriate substrate under the defined assay conditions.

3. PHYSICOCHEMICAL PROPERTIES:

pH Optima:	6.4-6.8
pH Stability:	5.6-7
Temperature Optima:	40°C
Temperature Stability:	< 40°C

4. STORAGE CONDITIONS:

The enzyme is supplied as an ammonium sulphate suspension in the presence of 0.02% sodium azide and should be stored at 4°C. On diluting in buffer or water, the enzyme should be stored in the frozen state.

It is recommended that all buffers used for dilution contain BSA (1.0 mg/mL).

The concentration of enzyme as supplied is approx. 1000 Units/mL.