



## β-galactosidase

### Product description

The enzyme β-galactosidase is a commonly used reporter molecule and is a very important marker for the lacZ gene. One vial contains approximately 25 mg (8 kunits) lyophilizate of partly purified enzyme. For laboratory use only.

### Storage and Stability

- Store at -20°C
- The enzyme is stable for 5 years when stored at -20°C unbroken. Repeated freezing and thawing is not recommended.

### Form

β-galactosidase is supplied as lyophilized powder from 1 mM Tris-HCl (pH 7.2), 1 mM MgCl<sub>2</sub> and poly (ethylene) glycol 4000 <1.5 mg/ml, to which no preservatives have been added.

### Instructions for use

One vial contains approximately 25 mg partly purified enzyme. Reconstitution of the enzyme lyophilizate in 4 ml of water will give a solution of approximately 1 mM Tris-HCl, pH 7.2 and 1 mM MgCl<sub>2</sub>.

### Product specifications

#### ACTIVITY

The specific activity is 230-375 Units/mg protein at 410nm, pH 7.0 and 25°C. (0.2 M Na-phosphate, 2mM MgCl<sub>2</sub>, 8% methanol, 0.25% Tween 20). One unit of enzyme hydrolyses 1 micromole of o-nitro-phenyl-β-D-galactopyranoside (ONPG) (46mM) per minute (the extinction coefficient for ONP at 410 nm is 2100 M/cm). The protein concentration is assayed by the biuret method with BSA as standard. The free thiol groups on the enzyme surface are characterized and are 14-18 mole/mole enzyme. The free thiol groups are useful for derivatisation of the enzyme.

#### MOLECULAR WEIGHT

465 000 g/ mole (each subunit 116 000 g/mole).

### Ordering information

PRODUCT NUMBER	PRODUCT DESCRIPTION	SOLUTION VOLUME
10-1101-25	β-galactosidase	25 mg

