β-Glucosidase
from almonds

Product Number G0395
Storage Temperature 2-8 °C

Product Description
Enzyme Commission (EC) Number: 3.2.1.21
CAS Number: 9001-22-3
Synonyms: B-D-Glucoside glucohydrolase
Molecular Weight: 135 kDa
Extinction Coefficient: $E_{1%}^{1cm} = 7.06$ (280 nm)
pl: 7.3

β-Glucosidase from almonds is a homodimer consisting of 2 equal subunits of 65 kDa and is a glycoprotein. The enzyme catalyzes the following reaction:

$$\beta-D-Glucoside + H_2O \rightarrow \beta-D-Glucose + Alcohol$$

In addition to β-D-glucoside, both β-D-galactosides and β-fucosides can also be hydrolyzed. Reported $K_M$ values are 6.0 mM for o-nitrophenyl β-D-glucoside and 1.8 mM for p-nitrophenyl β-D-fucoside. The enzyme does not require an activator, but is inhibited by gluconolactone, fuconolactone, castanospermine, 1-deoxynojirimycin, 1-azafagomine and its analogues, erythritol, and polyols.

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions
The enzyme is soluble in water (1 mg/ml).

References