

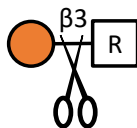
β1,3 Galactosidase contents

Catalog #	Description	Size	M. W.	Purity	pH	Storage
GE0901	β1,3 Galactosidase	2,000 units, lyophilized	71,681	> 95%	7.5-8.0 optimal	-20°C, up to 12 months
BA0501	10X Reaction Buffer 1	1 mL			7.5	4 to 25°C

This product is for research use only and not for resale or for any use in the manufacture of a therapeutic or for any diagnostic purpose

Product description: This product is recombinant β1,3 galactosidase (glycosyl hydrolase family GH35, EC #3.2.1.23), cloned from *Streptococcus pneumoniae* and expressed in *Escherichia coli* with an N-terminal 8xHis tag. The 8xHis tag may be removed by digestion with FasTEV™ (Cat #GE0501), a TEV protease with enhanced stability and catalytic activity.

This product catalyzes the hydrolysis of terminal β1,3-linked galactose (Gal) from oligosaccharides and glycoprotein substrates.



This product does not contain any detectable activities of proteases or other glycosidases.

Unit definition: One unit is defined as the amount of β1,3 Galactosidase required to catalyze the release of 1 nmole *p*-nitrophenol (pNP) from *p*-nitrophenyl-β-D-galactopyranoside (pNP-Gal) in 10 min at 37°C in 100 μL 1X Reaction Buffer 1 (20 mM Tris, 50 mM NaCl, 1 mM EDTA pH 7.5).

Product reconstitution: Dissolve the lyophilized product in 100 μL molecular grade water to make a 20,000 units/mL (Cat #GE0901) solution in enzyme storage buffer (20 mM Tris-HCl, 50 mM NaCl, 1 mM EDTA, pH 7.5). Once reconstituted, store at 4°C for up to 7 days or -20°C for up to 3 months. Aliquoting is recommended to avoid repeated freeze-thaw cycles.

Activity assay: One unit of enzyme is added to 100 μL of 500 μM pNP-Gal in 1X Reaction Buffer 1 at 37°C, followed by real-time measurements of absorption at 405 nm every 5 s for 120 s.

Reference: Cheng W, et al. J Biol Chem. 2012 Jun 29;287(27):22910-8. PMID: 22593580.