



CERTIFICATE OF ANALYSIS

Version 3.7

revised on June 7, 2023

$\beta(1-3,4,6)$ Galactosidase

PRODUCT NAME: $\beta(1-3,4,6)$ Galactosidase
PRODUCT NUMBERS: E-BG02, E-BG02-200, E-BG02-20

LOT NUMBER: 801.1B
EXPIRATION DATE: June 3, 2026
ASSAY DATE: May 27, 2023

SOURCE: Bovine testes
FORMULATION: 20 mM Tris-HCl pH 7.5, 50 mM NaCl, 0.5 mg/ml BSA
STORAGE: -20°C

ACTIVITY: Activity¹ 5 U/ml (Specification: ≥ 5 U/ml)
Specific Activity² 5.4 U/mg (Specification: ≥ 3 U/mg)

CONTAMINATING ACTIVITY ASSAYS:

Protease Assay ³	Passed	(Specification "Passed")
Glycosidase activity ⁴		
Beta-Galactosidase	Passed	(Specification "Passed")
N-acetylglucosaminidase	Passed	(Specification "Passed")
Alpha-Galactosidase	Passed	(Specification "Passed")

Contaminant tested for:	Substrate:
Protease	Denatured BSA
Beta-Galactosidase	p-nitrophenyl-beta-D-galactopyranoside
N-acetylglucosaminidase	p-nitrophenyl-beta-D-N-acetylglucosaminide
Alpha-Galactosidase	p-nitrophenyl-alpha-D-galactopyranoside

1. Defined as the amount of enzyme required to produce 1 μ mole of p-nitrophenol (pNP) in 1 minute at 37°C, pH 4.0 from p-nitrophenyl-Beta-D-galactopyranoside.
2. Protein concentration determined by Bradford method, using BSA as a standard.
3. For the protease assay, 10 μ g of denatured BSA is incubated at 37°C for 24 hr with 2 ul of enzyme. SDS-PAGE analysis of the treated BSA shows no evidence of degradation.
4. Unexpected glycosidic activity is tested by incubating the enzyme for 24 hours at 37°C with the appropriate substrates; the detection limit of this assay is 5 μ U/ml (IUB). A passing lot will have no detectable activity.

President - QA-Bio Inc
Authorized by Mike Gibson
June 7, 2023