



CERTIFICATE OF ANALYSIS

Version 3.7

revised on February 2, 2020

Alpha-(1-2,3,6) Mannosidase

PRODUCT NAME: Alpha-(1-2,3,6) Mannosidase
PRODUCT NUMBERS: E-AM01, E-AM01-200, E-AM01-20

LOT NUMBER: 401.1G
EXPIRATION DATE: December 03, 2021
ASSAY DATE: January 28, 2020

SOURCE: Jack Bean
FORMULATION: 20 mM Tris pH 7.5, 50 mM NaCl, 0.1 mM zinc chloride, filter sterilized
STORAGE: 4°C (Do not freeze)

ACTIVITY: Activity¹ 20 U/ml (Specification: ≥ 9 U/ml)
Specific Activity² 7.1 U/mg (Specification: ≥ 4 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:
Protease
Beta-Galactosidase
N-acetylglucosaminidase
Alpha-Galactosidase

Substrate:
Denatured BSA
p-nitrophenyl-beta-D-galactopyranoside
p-nitrophenyl-beta-D-N-acetylglucosaminide
p-nitrophenyl-alpha-D-galactopyranoside

1. Defined as the amount of enzyme required to hydrolyze 1 μ mole of p-nitrophenyl-alpha-p-mannoside to p-nitrophenol in 1 minute at pH 5.0 and 37°C.
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 μ l 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
February 2, 2020