



CERTIFICATE OF ANALYSIS

Version 3.7
revised on February 2, 2020

Sialidase Sp

PRODUCT NAME: Sialidase Sp
PRODUCT NUMBERS: E-S007, E-S007-200, E-S007-20

LOT NUMBER: 404.1C
EXPIRATION DATE: December 03, 2021
ASSAY DATE: January 28, 2020

SOURCE: *Streptococcus pneumonia*
FORMULATION: 50 mM sodium phosphate pH 7.5, filter sterilized.
STORAGE: 4°C (Do not freeze)

ACTIVITY: Activity¹ 5 U/ml (Specification: ≥ 5 U/ml)
Specific Activity² 210 U/mg (Specification: ≥ 150 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 μmole of methylumbelliferone in 1 minute at 37°C, pH 5.0 from MU-NANA [2'-(4-methylumbelliferyl)-alpha-D-N-acetylneuraminic acid].
2. Protein concentration determined by Bradford method, using BSA as a standard.
3. For the protease assay, 10 μg 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 μU/ml (IUB). A passing lot will have no detectable activity.

President - QA-Bio Inc
Authorized by Mike Gibson
February 2, 2020