

# Certificate of Analysis

**Product Name:** 2-(4-Methylumbelliferyl)- α-D-N- acetylneuraminic acid sodium salt (4-MU-NANA)  
**Cat #:** M-520  
**CAS #:** 76204-02-9  
**Lot #:** Lot Specific  
**Retest Date:** Lot Specific  
**Storage:<sup>†</sup>** Store at -80°C. Protect from light.

Test	Specs	Results
Color	almost white to slightly yellow	slightly off-white
Form	powder	powder
Color of Solution (3 % in water)	colorless to slightly yellow	colorless
Turbidity (0.3 % in water)	max. 2.0 NTU	1.2 NTU
Water Content (K. Fischer)	max. 10.0%	1.5%
Purity (TLC) (33 mg/mL in water; propanol/ ammonia/water 7:1:2; UV 254 nm)	min. 98 area-%	>99 area-%
TLC (33 mg/mL in water; propanol/ ammonia/water 7:1:2; UV 254 nm)	corresponds to reference material	corresponds
Free 4-MU (33 mg/mL in water; toluene/ ethanol/water 4:8:1; UV 366 nm after treating with ammonia vapor)	max. 1000 mg/kg	<1000 mg/kg
FT-IR Spectrum	corresponds to reference spectrum	corresponds

\* Gold Biotechnology, Inc. provides this Certificate of Analysis in good faith and to the best of its knowledge. It should not be substituted for the user's own raw material quality control. This material is for laboratory use only.

† Storage at listed temperature applies to retest date (if shown) or two years from purchase date. Check label for long term storage conditions, which may extend the product beyond the retest date and/or greater than two years from purchase.

**Gold Biotechnology, Inc.**  
 1328 Ashby Rd.  
 St. Louis, MO 63132  
 P: (314)890-8778  
 F: (314)890-0503  
 E: [contactgoldbio86@goldbio.com](mailto:contactgoldbio86@goldbio.com)