

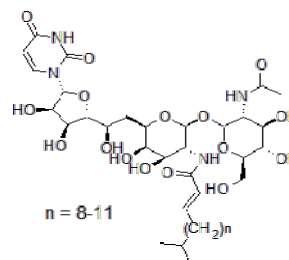
# Certificate of Analysis



## Product Identification

Catalog number	HB0880
Compound name	Tunicamycin
Source	Streptomyces sp.
Batch number	E0876-1-1
Batch molecular formula	A: C <sub>37</sub> H <sub>60</sub> N <sub>4</sub> O <sub>16</sub> (n=8) B: C <sub>38</sub> H <sub>62</sub> N <sub>4</sub> O <sub>16</sub> (n=9) C: C <sub>39</sub> H <sub>64</sub> N <sub>4</sub> O <sub>16</sub> (n=10) D: C <sub>40</sub> H <sub>66</sub> N <sub>4</sub> O <sub>16</sub> (n=11)
Batch molecular weight	816.9 830.93 844.95 858.99

## Chemical Structure



Method	QC requirement	QC Result
HPLC	Reverse Phase HPLC shows >98% as a mixture of 4 isomers	Meets specification: 5.97%, 42.19%, 39.56%, 12.28%
NMR	<sup>1</sup> H NMR in DMSO at 400 MHz consistent with structure	Meets specification
Mass spectrum	Electrospray positive analysis consistent with structure	Meets specification
Microanalysis	Elemental analysis is within 0.4% for the batch molecular formula	Meets specification
TLC	TLC analysis in BuOH/H <sub>2</sub> O/AcOH shows one spot under KMnO <sub>4</sub>	Meets specification: R <sub>f</sub> =0.3
Physical appearance	Off-white solid	Meets specification: Off-white solid
Solubility	Soluble in DMSO (50 mM)	Meets specification

Produced by

Signature

Passed by

Signature

Date

05-09-18

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.