

# Certificate of Analysis

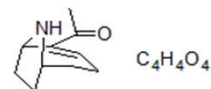


## Product Identification

**Catalog number** HB2023  
**Compound name** (±)-Anatoxin A fumarate  
**Chemical name** (±)-2-Acetyl-9-aza bicyclo[4.2.1]non-2-ene fumarate

**Batch number** E2100-20-3  
**Batch molecular formula** C<sub>14</sub>H<sub>19</sub>NO<sub>5</sub>  
**Batch molecular weight** 281.31

## Chemical Structure



## Method

## QC requirement

## QC Result

<b>HPLC</b>	Reverse Phase HPLC shows >96% purity as two peaks; Anatoxin and Fumaric acid	Meets specification: 99.9%
<b>NMR</b>	<sup>1</sup> H NMR in D <sub>2</sub> O consistent with structure	Meets specification
<b>Mass spectrum</b>	Electrospray positive analysis consistent with structure	Meets specification
<b>TLC</b>	TLC analysis in 5% MeOH/DCM shows one spot under ninhydrin	Meets specification: R <sub>f</sub> = 0.5
<b>Physical appearance</b>	White to off-white solid	Meets specification: Off-white solid
<b>Solubility</b>	Soluble in water (10 mg/ml) and in ethanol (1 mg/ml)	Meets specification

Produced by Richard Patterson

Signature

Passed by Steve Roome

Signature

Date

23/02/2023

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