Product Name: Demethylasterriquinone B1
Catalog No.: 1819
Batch No.: 3
CAS Number: 78860-34-1
IUPAC Name: 2-[2-(1,1-Dimethyl-2-propenyl)-1H-indol-3-yl]-3,6-dihydroxy-5-[7-(3-methyl-2-butenyl)-1H-indol-3-yl]-2,5-cyclohexadiene-1,4-dione

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{32}\text{H}_{30}\text{N}_{2}\text{O}_{4} \)
Batch Molecular Weight: 506.59
Physical Appearance: Black solid
Solubility: DMSO to 100 mM
Storage: Desiccate at -20°C

2. ANALYTICAL DATA

HPLC: Shows 97.2% purity
\(^1\text{H} \text{NMR:}\) Consistent with structure
Mass Spectrum: Consistent with structure
**Product Information**

**Product Name:** Demethylasterriquinone B1

**CAS Number:** 78860-34-1

**IUPAC Name:** 2-[2-(1,1-Dimethyl-2-propenyl)-1H-indol-3-yl]-3,6-dihydroxy-5-[7-(3-methyl-2-butenyl)-1H-indol-3-yl]-2,5-cyclohexadiene-1,4-dione

**Description:**
Demethylasterriquinone B1 is a selective insulin receptor (IR) activator (EC$_{50}$ values are 3 - 6μM for IRTK and 100μM for IGF1R and EGFR). Increases IR β subunit tyrosine phosphorylation and activation of PI 3-kinase and Akt, but not ERK. Induces glucose uptake in adipocytes and skeletal muscle in vitro, without enhancing vascular proliferation. Binds GAPDH. Also activates Trk by interacting at a site distinct from the neurotrophin-binding site.

**Physical and Chemical Properties:**

- **Batch Molecular Formula:** C$_{32}$H$_{30}$N$_2$O$_4$
- **Batch Molecular Weight:** 506.59
- **Physical Appearance:** Black solid
- **Minimum Purity:** ≥95%
- **Batch Molecular Structure:**

![Batch Molecular Structure](image)

**Storage:** Desiccate at -20°C

**Solubility & Usage Info:**
DMSO to 100 mM

**Stability and Solubility Advice:**
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

- **SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.
- **SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

