



# **Certificate of Analysis**

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Product Name: EMI 48 Catalog No.: 7424 Batch No.: 1

CAS Number: 34564-13-1

IUPAC Name: 7-(Diethylamino)-3-(5-methyl-2-benzoxazolyl)-2*H*-1-benzopyran-2-one

### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Weight: 348.4

Physical Appearance: Orange solid

**Solubility:** DMSO to 20 mM with gentle warming

Storage: Store at -20°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**HPLC:** Shows 98.7% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 72.4 5.79 8.04 Found 72.51 5.84 8.08

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



# **Product Information**

Print Date: Oct 18th 2021

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IUPAC Name: 7-(Diethylamino)-3-(5-methyl-2-benzoxazolyl)-2*H*-1-benzopyran-2-one

#### **Description:**

EMI 48 is an inhibitor of mutant EGFR; it inhibits L858R/T970M/C797S mutants and ex19del/T790M/C797S triple mutants (inhibitory effects at 5  $\mu$ M) but has no effect on wild-type EGFR. EMI 48 induces EGFR degradation (<5  $\mu$ M), and inhibits activation of ERK, S6 and AKT.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>21</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub>. Batch Molecular Weight: 348.4 Physical Appearance: Orange solid

Minimum Purity: ≥98%

#### **Batch Molecular Structure:**

Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

## Solubility & Usage Info:

DMSO to 20 mM with gentle warming

#### 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:

Saraon et al (2020) A drug discovery platform to identify compounds that inhibit EGFR triple mutants. Nat.Chem.Biol. 16 577. PMID: 32094923.