

**Certificate of Analysis** 

Print Date: Jan 16<sup>th</sup> 2016 **WWW.tocris.com** 

Product Name: ML 365 Catalog No.: 5337 Batch No.: 1

CAS Number: 947914-18-3

IUPAC Name: 2-Methoxy-N-[3-[(3-methylbenzoyl)amino]phenyl]benzamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{22}H_{20}N_2O_3$ . <sup>1</sup>/<sub>4</sub>H<sub>2</sub>O

Batch Molecular Weight: 364.91

Physical Appearance: Off White solid

Solubility: DMSO to 100 mM ethanol to 50 mM

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen

Theoretical 72.41 5.66 7.68 Found 72.37 5.56 7.68

Carbon Hydrogen Nitrogen

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



# **Product Information**

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## **Description:**

Potent and selective TASK-1 ( $K_{2P}3.1/KCNK3$ ) channel blocker ( $IC_{50}$  values are 4 and 390 nM at TASK-1 and TASK-3, respectively). Displays little or no inhibition at  $K_{ir}2.1$ , voltage-gated potassium channels, KCNQ2 and  $K_{V}11.1$  (hERG).

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

Batch Molecular Formula:  $C_{22}H_{20}N_2O_3$ .  $\frac{1}{4}H_2O$ 

Batch Molecular Weight: 364.91 Physical Appearance: Off White solid

Minimum Purity: >99%

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

Storage: Store at +4°C

### Solubility & Usage Info:

DMSO to 100 mM ethanol to 50 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:

**Zou** *et al* (2013) ML365: Development of bis-amides as selective inhibitors of the KCNK3/TASK1 two pore potassium channel. Probe Reports from the NIH Molecular Libraries Program. PMID: 24479195.

Flaherty et al (2014) Potent and selective inhibitors of the TASK-1 potassium channel through chemical optimization of a bis-amide scaffold. Bioorg.Med.Chem.Lett. 24 3968. PMID: 25017033.