TOCRIS
a bio-techne brand

Print Date: Sep 16th 2016

# Certificate of Analysis

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**Product Name:** **4-CMTB** **Catalog No.: 4642** **Batch No.: 1**

CAS Number: 300851-67-6

IUPAC Name: 4-chloro-α-(1-methylethyl)-*N*-2-thiazolylbenzeneacetamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** $C_{14}H_{15}ClN_2O_S \cdot ¼H_2O$

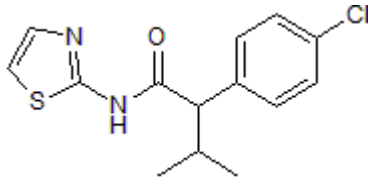
**Batch Molecular Weight:** 299.3

**Physical Appearance:** White solid

**Solubility:** DMSO to 100 mM
ethanol to 20 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**




## 2. ANALYTICAL DATA

**HPLC:** Shows 99% purity

**$^1$H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

| | Carbon | Hydrogen | Nitrogen |
|---|---|---|---|
| Theoretical | 56.18 | 5.22 | 9.36 |
| Found | 56.22 | 5.09 | 9.1 |



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# Product Information



**Product Name:** **4-CMTB** **Catalog No.: 4642** **Batch No.: 1**

CAS Number: 300851-67-6

IUPAC Name: 4-chloro-α-(1-methylethyl)-*N*-2-thiazolylbenzeneacetamide

**Description:**

Free fatty acid receptor FFA2 agonist ($pEC_{50}$ = 6.38) and positive allosteric modulator. Binds at a site distinct from the orthosteric site; modulates the activity of short-chain fatty acids at FFA2 via the FFA2 second extracellular loop (ECL2).

**Physical and Chemical Properties:**

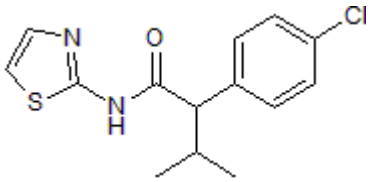
Batch Molecular Formula: $C_{14}H_{15}ClN_2O_S.¼H_2O$

Batch Molecular Weight: 299.3

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**




**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM
ethanol to 20 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:**

**Smith** *et al* (2011) Extracellular loop 2 of the free fatty acid receptor 2 mediates allosterism of a phenylacetamide ago-allosteric modulator. Mol.Pharmacol. ***80*** 163. PMID: 21498659.

**Milligan** *et al* (2009) Agonism and allosterism: the pharmacology of the free fatty acid receptors FFA2 and FFA3. Br.J.Pharmacol. ***158*** 146. PMID: 19719777.