

## Certificate of Analysis

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**Product Name:** CCG 50014

**Catalog No.:** 4567

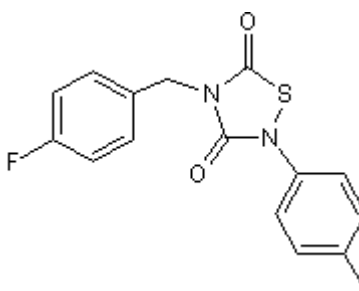
**Batch No.:** 1

CAS Number: 883050-24-6

IUPAC Name: 4-[(4-Fluorophenyl)methyl]-2-(4-methylphenyl)-1,2,4-thiadiazolidine-3,5-dione

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>16</sub>H<sub>13</sub>FN<sub>2</sub>O<sub>2</sub>S  
**Batch Molecular Weight:** 316.35  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 98.6% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	60.75	4.14	8.86
Found	60.32	4.04	8.86

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

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**Description:**

Potent and selective inhibitor of regulator of G-protein signaling 4 (RGS4) protein (IC<sub>50</sub> values are 30.1 nM and 11.0 μM for RGS4 and RGS8 respectively). Exhibits >20-fold selectivity for RGS4 over other RGS proteins.

**Physical and Chemical Properties:**

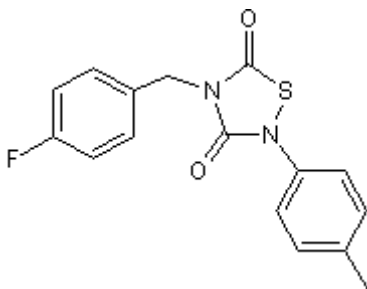
Batch Molecular Formula: C<sub>16</sub>H<sub>13</sub>FN<sub>2</sub>O<sub>2</sub>S

Batch Molecular Weight: 316.35

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at +4°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:**

**Blazer et al** (2011) A nanomolar potency small molecule inhibitor of regulator of G protein signaling (RGS) proteins. *Biochemistry* **50** 3181. PMID: 21329361.

**Turner et al** (2012) Small molecule inhibitors of regulators of G protein signalling (RGS) proteins. *ACS Med.Chem.Lett.* **3** 146. PMID: 22368763.

**Vashisth et al** (2013) Conformational dynamics of a regulator of g-protein signaling protein reveals a mechanism of allosteric inhibition by a small molecule. *ACS Chem.Biol.* **8** 2778. PMID: 24093330.

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