

## Certificate of Analysis

**Product Name:** R 59-022

**Catalog No.:** 2194

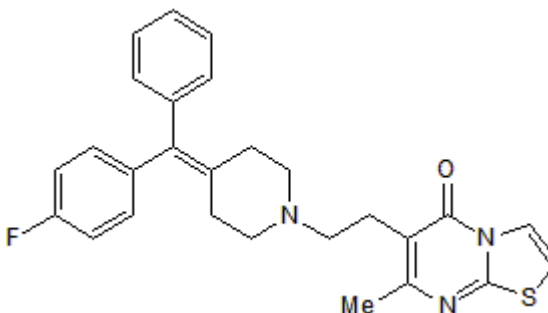
**Batch No.:** 1

CAS Number: 93076-89-2

IUPAC Name: 6-[2-[4-[(4-Fluorophenyl)phenylmethylene]-1-piperidinyl]ethyl]-7-methyl-5*H*-thiazolo[3,2-*a*]pyrimidin-5-one

### 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>27</sub> H <sub>26</sub> FN <sub>3</sub> OS
<b>Batch Molecular Weight:</b>	459.58
<b>Physical Appearance:</b>	Pale brown solid
<b>Solubility:</b>	ethanol to 20 mM DMSO to 50 mM
<b>Storage:</b>	Store at +4°C
<b>Batch Molecular Structure:</b>	



### 2. ANALYTICAL DATA

<b>TLC:</b>	R <sub>f</sub> = 0.52 (Dichloromethane:Methanol:Triethylamine [9:1:0.1])
<b>HPLC:</b>	Shows >98.4% purity
<b><sup>1</sup>H NMR:</b>	Consistent with structure
<b>Mass Spectrum:</b>	Consistent with structure

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

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**Description:**

Diacylglycerol (DAG) kinase inhibitor ( $IC_{50} = 2.8 \mu M$ ); increases protein kinase C activity. Potentiates thrombin-induced platelet aggregation and induces neutrophil chemotaxis. Inhibits U46619-induced contractions in mouse aorta and porcine coronary artery.

**Physical and Chemical Properties:**

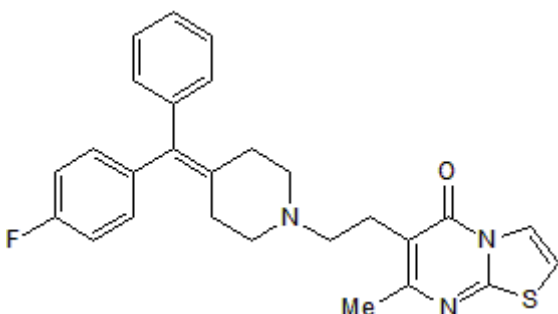
Batch Molecular Formula:  $C_{27}H_{26}FN_3OS$

Batch Molecular Weight: 459.58

Physical Appearance: Pale brown solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

ethanol to 20 mM

DMSO 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:**

**de Chaffoy de Courcelles et al** (1985) R 59 022, a diacylglycerol kinase inhibitor. Its effect on diacylglycerol and thrombin-induced C kinase activation in the intact platelet. *J.Biol.Chem.* **260** 15762. PMID: 2999135.

**Nunn and Watson** (1987) A diacylglycerol kinase inhibitor, R59022, potentiates secretion by and aggregation of thrombin-stimulated human platelets. *Biochem.J.* **243** 809. PMID: 2821994.

**Boonen et al** (1993) Neutrophil chemotaxis induced by the diacylglycerol kinase inhibitor R59022. *Biochim.Biophys.Acta* **1178** 97. PMID: 8392381.

**Nobe et al** (2004) Novel diacylglycerol kinase inhibitor selectively suppressed an U46619-induced enhancement of mouse portal vein contraction under high glucose conditions. *Br.J.Pharmacol.* **143** 166. PMID: 15289283.

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**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel: +1 612 379 2956