

# Certificate of Analysis

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**Product Name:** R 7050

**Catalog No.:** 5432

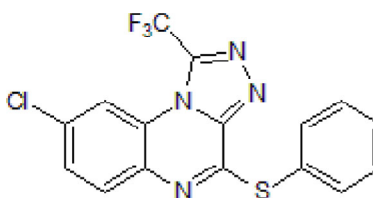
**Batch No.:** 2

CAS Number: 303997-35-5

IUPAC Name: 8-Chloro-4-(phenylthio)-1-(trifluoromethyl)-[1,2,4]triazolo[4,3-a]quinoxaline

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>16</sub>H<sub>8</sub>ClF<sub>3</sub>N<sub>4</sub>S  
**Batch Molecular Weight:** 380.77  
**Physical Appearance:** Yellow/orange solid  
**Solubility:** DMSO to 20 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	50.47	2.12	14.71
Found	50.43	2.04	14.62

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

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**Description:**

R 7050 is an inhibitor of TNF- $\alpha$  receptor 1 (TNFR1) signaling; blocks TNFR1 association with TRADD and RIP1. Inhibits TNF- $\alpha$ -induced NF- $\kappa$ B and MAPK signaling pathway activation. Attenuates intracerebral hemorrhage-induced neurovascular injury in mice.

**Physical and Chemical Properties:**

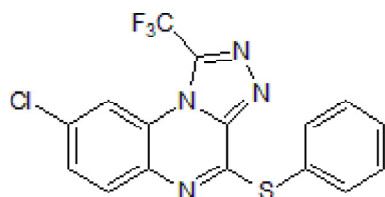
Batch Molecular Formula: C<sub>16</sub>H<sub>8</sub>ClF<sub>3</sub>N<sub>4</sub>S

Batch Molecular Weight: 380.77

Physical Appearance: Yellow/orange solid

**Minimum Purity:**  $\geq$ 98%

**Batch Molecular Structure:**



**Storage:** Store at +4°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

**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. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**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:**

**King et al** (2013) TNF- $\alpha$  receptor antagonist, R-7050, improves neurological outcomes following intracerebral hemorrhage in mice. *Neurosci.Lett.* **542** 92. PMID: 23499961.

**Gururaja et al** (2007) A class of small molecules that inhibit TNF $\alpha$ -induced survival and death pathways via prevention of interactions between TNF $\alpha$ RI, TRADD, and RIP1. *Chem.Biol.* **14** 1105. PMID: 17961823.

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