

**Product Name:** SGC 6870

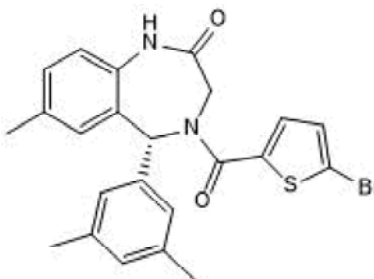
**Catalog No.:** 7182

**Batch No.:** 1

**IUPAC Name:** (R)-4-(5-Bromothiophene-2-carbonyl)-5-(3,5-dimethylphenyl)-7-methyl-1,3,4,5-tetrahydro-2H-benzo[e][1,4]diazepin-2-one

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>23</sub>H<sub>21</sub>BrN<sub>2</sub>O<sub>2</sub>S  
**Batch Molecular Weight:** 469.4  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
ethanol to 100 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.8% purity  
**Chiral HPLC:** Shows 99.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	58.85	4.51	5.97
Found	58.74	4.59	6

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**Description:**

SGC 6870 is a potent and selective protein arginine methyltransferase 6 (PRMT6) allosteric inhibitor (IC<sub>50</sub> = 77 nM). Exhibits selectivity over all other PRMTs and 23 methyltransferases. In HEK293T cells overexpressing PRMT6, inhibits asymmetric dimethylation of H3R2 (IC<sub>50</sub> = 0.8 μM) Negative control SGC 6870N (Cat. No. 7184) also available.

**Physical and Chemical Properties:**

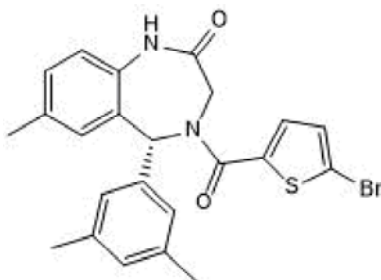
Batch Molecular Formula: C<sub>23</sub>H<sub>21</sub>BrN<sub>2</sub>O<sub>2</sub>S

Batch Molecular Weight: 469.4

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

**Shen et al (2020)** A first-in-class, highly selective and cell-active allosteric inhibitor of protein arginine methyltransferase 6 (PRMT6) bioRxiv - not yet peer reviewed.

**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol 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.

**Licensing Information:**

This probe is supplied in conjunction with the Structural Genomics Consortium. For further characterization details, please visit the SGC 6870 probe summary on the SGC website.

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