Certificate of Analysis

Product Name: **CGS 15943** **Catalog No.: 1699** **Batch No.: 4**

CAS Number: 104615-18-1

IUPAC Name: 9-Chloro-2-(2-furanyl)-[1,2,4]triazolo[1,5-*c*]quinazolin-5-amine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{13}H_8ClN_5O$

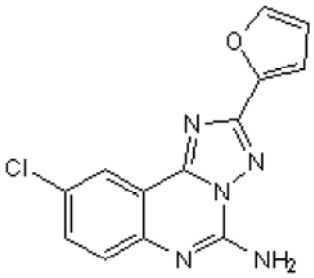
Batch Molecular Weight: 285.69

Physical Appearance: Off White solid

Solubility: DMSO to 5 mM

Storage: Store at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.8 (Dichloromethane:Methanol [95:5])

HPLC: Shows 99.6% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	54.65	2.82	24.51
Found	54.45	2.76	24.63

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Description:

CGS 15943 is a potent adenosine receptor antagonist (K_i values are 3.5, 4.2, 16 and 51 nM for human A_1, A_{2A}, A_{2B} and A_3 receptors respectively). Inhibits the catalytic subunit of the class IB PI3K isoform p110γ (IC_{50} = 1.1 μM). Blocks HCC and HDAC cell proliferation in vitro via inhibition of the PI3K/Akt pathway; reduces proliferation of ER^+ breast cancer cells. Also acts as a BMP-4 mimetic to stimulate osteogenic differentiation. Orally active in vivo.

Physical and Chemical Properties:

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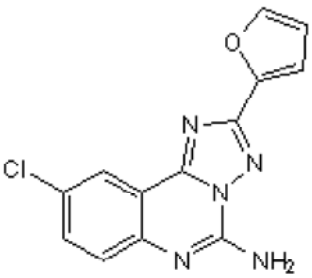
Batch Molecular Weight: 285.69

Physical Appearance: Off White solid

Minimum Purity: ≥99%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

DMSO to 5 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:

Shropshire *et al* (2022) Association of adenosine signaling gene signature with estrogen receptor-positive breast and prostate cancer bone metastasis. Front.Med. (Lausanne) ***9*** 965429. PMID: 36186774.

Wesseler *et al* (2022) Phenotypic discovery of triazolo[1,5-c]quinazolines as a first-in-class bone morphogenetic protein amplifier chemotype. J.Med.Chem. ***65*** 15263. PMID: 36346705.

Edling *et al* (2014) Caffeine and the analog CGS 15943 inhibit cancer cell growth by targeting the phosphoinositide 3-kinase/Akt pathway. Cancer Biol.Ther. ***15*** 524. PMID: 24521981.