

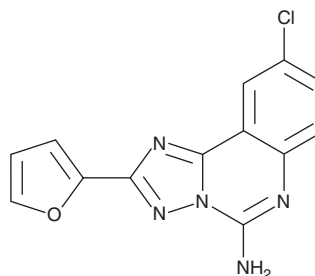
# PRODUCT INFORMATION



## CGS 15943

Item No. 22073

**CAS Registry No.:** 104615-18-1  
**Formal Name:** 9-chloro-2-(2-furanyl)-[1,2,4]triazolo[1,5-c]quinazolin-5-amine  
**Synonym:** CGS 15943A  
**MF:** C<sub>13</sub>H<sub>8</sub>ClN<sub>5</sub>O  
**FW:** 285.7  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 260 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

CGS 15943 is supplied as a crystalline solid. A stock solution may be made by dissolving the CGS 15943 in the solvent of choice, which should be purged with an inert gas. CGS 15943 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of CGS 15943 in these solvents is approximately 0.5 mg/ml and 1 mg/ml, respectively.

CGS 15943 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CGS 15943 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CGS 15943 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

CGS 15943 is an orally bioavailable non-xanthine antagonist at adenosine (A) receptors with IC<sub>50</sub> values of 3.5, 4.2, 16, and 51 nM in CHO cells transfected with human recombinant A<sub>1</sub>, A<sub>2A</sub>, A<sub>2B</sub>, and A<sub>3</sub> receptors, respectively.<sup>1,2</sup> It also binds to the phosphatidylinositol 3-kinase (PI3K) catalytic subunit p110γ, and it inhibits proliferation of HCC hepatocellular carcinoma and PDAC pancreatic cancer adenocarcinoma cells through the PI3K/Akt signaling pathway.<sup>3</sup> In rats, CGS 15943 (0.1-10 mg/kg, i.p.) increases locomotor activity in a dose-dependent manner.<sup>4</sup> It also reinforces and reinstates cocaine-seeking in baboons through an adenosine-dependent mechanism.<sup>5</sup>

### References

1. Klotz, K.-N. Adenosine receptors and their ligands. *Naunyn-Schmiedeberg's Arch. Pharmacol.* **362(4)**, 382-391 (2000).
2. Ghai, G., Francis, J.E., Williams, M., et al. Pharmacological characterization of CGS 15943A: A novel nonxanthine adenosine antagonist. *J. Pharmacol. Exp. Ther.* **242(3)**, 784-790 (1987).
3. Edling, C.E., Selvaggi, F., Ghonaim, R., et al. Caffeine and the analog CGS 15943 inhibit cancer cell growth by targeting the phosphoinositide 3-kinase/Akt pathway. *Cancer Biol. Ther.* **15(5)**, 524-532 (2014).
4. Holtzman, S.G. CGS 15943, a nonxanthine adenosine receptor antagonist: Effects on locomotor activity of nontolerant and caffeine-tolerant rats. *Life Sci.* **49(21)**, 1563-1570 (1991).
5. Weerts, E.M. and Griffiths, R.R. The adenosine receptor antagonist CGS15943 reinstates cocaine-seeking behavior and maintains self-administration in baboons. *Psychopharmacology (Berl)* **168(1-2)**, 155-163 (2003).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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