

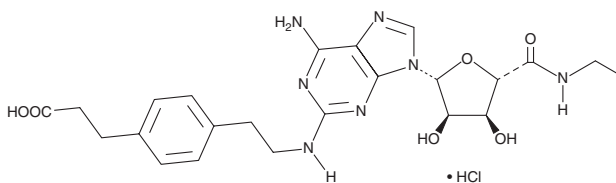
PRODUCT INFORMATION



CGS 21680 (hydrochloride)

Item No. 17126

CAS Registry No.: 124431-80-7
Formal Name: 4-[2-[[6-amino-9-(N-ethyl-β-D-ribofuranuronamidosyl)-9H-purin-2-yl]amino]ethyl]-benzenepropanoic acid, monohydrochloride
MF: C₂₃H₂₉N₇O₆ • HCl
FW: 536.0
Purity: ≥98%
UV/Vis.: λ_{max}: 210, 218, 252, 292 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 21680 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the CGS 21680 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. CGS 21680 (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CGS 21680 (hydrochloride) in these solvents is approximately 30 and 20 mg/ml, respectively.

CGS 21680 (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CGS 21680 (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CGS 21680 (hydrochloride) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CGS 21680 is a potent, selective agonist of the adenosine A_{2A} receptor (K_i = 11-46 nM).^{1,2} It is less effective at adenosine A₁ and A₃ receptors (K_is = 0.5-3.1 and 0.6-1 μM, respectively) and is without effect at adenosine A_{2B} (K_i > 10 μM).²⁻⁵ CGS 21680 is commonly used to study the actions of the adenosine A_{2A} receptor in cells and tissues.⁶⁻⁸

References

1. Ji, X., Gallo-Rodriguez, C., and Jacobson, K.A. *Biochem. Biophys. Res. Commun.* **203(1)**, 570-576 (1994).
2. Kim, H.O., Ji, X., Siddiqi, S.M., et al. *J. Med. Chem.* **37(21)**, 3614-3621 (1994).
3. Klotz, K.N., Hessling, J., Hegler, J., et al. *Naunyn Schmiedebergs Arch. Pharmacol.* **357(1)**, 1-9 (1998).
4. Linden, J., Thai, T., Figler, H., et al. *Mol. Pharmacol.* **56(4)**, 705-713 (1999).
5. Varani, K., Merighi, S., Gessi, S., et al. *Mol. Pharmacol.* **57(5)**, 968-975 (2000).
6. Cheng, M.K., Doumad, A.B., Jiang, H., et al. *Br. J. Pharmacol.* **141(3)**, 441-448 (2004).
7. Ledent, C., Vaugeois, J.-M., Schiffmann, S.N., et al. *Nature* **388(6643)**, 674-678 (1997).
8. Gnad, T., Scheibler, S., von Kügelgen, I., et al. *Nature* **516(7531)**, 395-399 (2014).

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.

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