# PRODUCT INFORMATION



## ZM 241385

Item No. 20447

CAS Registry No.: 139180-30-6

Formal Name: 4-[2-[[7-amino-2-(2-furanyl)[1,2,4]

triazolo[1,5-a][1,3,5]triazin-5-yl]

amino]ethyl]-phenol

MF:  ${
m C_{16}H_{15}N_7O_2}\ 337.3$ FW:

UV/Vis.:  $\lambda_{\text{max}}$ : 228, 256 nm Supplied as: A crystalline solid

≥98%

Storage: -20°C Stability: ≥4 years

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

### **Laboratory Procedures**

ZM 241385 is supplied as a crystalline solid. A stock solution may be made by dissolving the ZM 241385 in the solvent of choice, which should be purged with an inert gas. ZM 241385 is soluble in organic solvents such as ethanol and DMSO. The solubility of ZM 241385 in these solvents is approximately 5 and 100 mM, respectively.

#### Description

**Purity:** 

ZM 241385 is a potent antagonist of  $A_{2A}$  adenosine receptors (pIC $_{50}$  = 9.52 for displacement of 5'-N-ethylcarboxamidoadenosine from rat phaeochromocytoma cell membranes).<sup>1,2</sup> It displays little or no activity at other A adenosine receptors. ZM 241385 is active in vivo.<sup>3,4</sup> It acts as an inverse agonist at constitutively active mutants of the human A<sub>2B</sub> adenosine receptor.<sup>5</sup>

#### References

- 1. Poucher, S.M., Keddie, J.R., Singh, P., et al. The in vitro pharmacology of ZM 241385, a potent, non-xanthine A<sub>2a</sub> selective adenosine receptor antagonist. Br. J. Pharmacol. 115(6), 1096-1102 (1995).
- Linden, J., Thai, T., Figler, H., et al. Characterization of human  $A_{2B}$  adenosine receptors: Radioligand binding, western blotting, and coupling to  $G_q$  in human embryonic kidney 293 cells and HMC-1 mast cells. Mol. Pharmacol. 56(4), 705-713 (1999).
- Keddie, J.R., Poucher, S.M., Shaw, G.R., et al. In vivo characterisation of ZM 241385, a selective adenosine A<sub>2Δ</sub> receptor antagonist. Eur. J. Pharmacol. **301(1-3)**, 107-113 (1996).
- 4. Poucher, S.M., Keddie, J.R., Brooks, R., et al. Pharmacodynamics of ZM 241385, a potent A<sub>2a</sub> adenosine receptor antagonist, after enteric administration in rat, cat and dog. J. Pharm. Pharmacol. 48(6), 601-606 (1996).
- 5. Li, Q., Ye, K., Blad, C.C. et al. ZM241385, DPCPX, MRS1706 are inverse agonists with different relative intrinsic efficacies on constitutively active mutants of the human adenosine A<sub>2B</sub> receptor. J. Pharmacol. Exp. Ther. 320(2), 637-645 (2007).

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

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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