# **PRODUCT** INFORMATION



A-839977

Item No. 30934

| CAS Registry No.:  | 870061-27-1  |     |
|--|--|-----|
| Formal Name:   | 1-(2,3-dichlorophenyl)-N-[[2-(2-pyridinyloxy)                    | N N |
|  | phenyl]methyl]-1H-tetrazol-5-amine                               | N N |
| MF:  | C <sub>19</sub> H <sub>14</sub> Cl <sub>2</sub> N <sub>6</sub> O |     |
| FW:  | 413.3  | o o |
| Purity:  | ≥98%   |     |
| Supplied as:   | A crystalline solid  | N   |
| Storage:   | -20°C  |     |
| Stability:   | ≥4 years   |     |
| Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis. |  |     |

# Laboratory Procedures

A-839977 is supplied as a crystalline solid. A stock solution may be made by dissolving the A-839977 in the solvent of choice, which should be purged with an inert gas. A-839977 is soluble in DMSO.

# Description

A-389977 is an antagonist of the purinergic P2X7 receptor.<sup>1</sup> It inhibits BzATP-evoked intracellular calcium influx in 1321N1 cells expressing human, rat, and mouse receptors (IC<sub>50</sub>s = 20, 42, and 150 nM, respectively). A-839977 inhibits BzATP-induced YO-PRO dye uptake, a marker of membrane pore formation, and IL-1β release from THP-1 cells (IC<sub>50</sub>s = 6.6 and 37 nM, respectively). In vivo, A-389977 (30, 100, and 300 µmol/kg, i.p.) reduces thermal hyperalgesia in rats. A-389977 (40 mg/kg) reduces thermal and mechanical hyperalgesia in a rat MRMT-1 mammary carcinoma model of cancer-induced bone pain.<sup>2</sup>

# References

- 1. Honore, P., Donnelly-Roberts, D., Namovic, M., et al. The antihyperalgesic activity of a selective P2X7 receptor antagonist, A-839977, is lost in IL-1αβ knockout mice. Behav. Brain Res. 204(1), 77-81 (2009).
- 2. Falk, S., Schwab, S.D., Frøsig-Jørgensen, M., et al. P2X7 receptor-mediated analgesia in cancer-induced bone pain. Neuroscience 291, 93-105 (2015).

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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