# PRODUCT INFORMATION



## **DPTN** (hydrochloride)

Item No. 41540

CAS Registry No.: 325767-87-1

N-[4-(3,5-dimethylphenyl)-5-(4-pyridinyl)-Formal Name:

2-thiazolyl]-3-pyridinecarboxamide,

dihydrochloride

MF: C<sub>22</sub>H<sub>18</sub>N<sub>4</sub>OS • 2HCl

459.4 FW: **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 years 2HCl

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

#### **Laboratory Procedures**

DPTN (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the DPTN (hydrochloride) in the solvent of choice, which should be purged with an inert gas. DPTN (hydrochloride) is soluble (≥10 mg/ml) in DMSO.

#### Description

DPTN is an adenosine  $A_3$  receptor antagonist ( $K_i = 0.36$  nM for the human receptor).<sup>1</sup> It is selective for the adenosine  $A_3$  receptor over the adenosine  $A_1$  and  $A_{2A}$  receptors ( $K_i$ s = >666 and >826 nM, respectively). DPTN (10 mg/kg) prevents dye leakage in a rat model of plasma extravasation induced by the adenosine A<sub>3</sub> receptor agonist IB-MECA (piclidenoson; Item No. 28445). It, alone and in combination with the synthetic glucocorticoid dexamethasone (Item No. 11015), inhibits airway hypersensitivity to acetylcholine in a rat model of allergen-induced asthma stimulated by ovalbumin inhalation when administered at a dose of 10 mg/kg.

### Reference

1. Miwatashi, S., Arikawa, Y., Matsumoto, T., et al. Synthesis and biological activities of 4-phenyl-5-pyridyl-1,3-thiazole derivatives as selective adenosine A<sub>3</sub> antagonists. Chem. Pharm. Bull. **56(8)**, 1126-1137 (2008).

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.

## WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 08/23/2024

#### **CAYMAN CHEMICAL**

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM