PRODUCT INFORMATION



PD 81723

Item No. 42371

CAS Registry No.: 132861-87-1

Formal Name: (2-amino-4,5-dimethyl-3-thienyl)

[3-(trifluoromethyl)phenyl]-methanone

Synonym:

MF: $C_{14}H_{12}F_3NOS$

299.3 FW: **Purity:** ≥95% Supplied as: A 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

PD 81723 is supplied as a solid. A stock solution may be made by dissolving the PD 81723 in the solvent of choice, which should be purged with an inert gas. PD 81723 is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

PD 81723 is a positive allosteric modulator of the adenosine A_1 receptor. PD 81723 (10 μM) inhibits apoptosis induced by TNF-α and cycloheximide (Item No. 14126) in HK-2 kidney epithelial cells.² It increases right atrial heart rate in combination with adenosine deaminase (ADA) in isolated rat right atria (EC₅₀ = 0.83 nM).² PD 81723 (3 mg/kg) reduces plasma creatinine levels and infarct area in a mouse model of renal ischemia-reperfusion injury.1

References

- 1. Bruns, R.F., and Fergus, J.H. Allosteric enhancement of adenosine A₁ receptor binding and function by 2-amino-3-benzoylthiophenes. Mol. Pharmacol. 38(6), 939-949 (1990).
- 2. Park, S.W., Kim, J.Y., Ham, A., et al. A₁ adenosine receptor allosteric enhancer PD-81723 protects against renal ischemia-reperfusion injury. Am. J. Physiol. Renal. Physiol. 303(5), F721-F732 (2012).
- Mudumbi, R.V., Montamat, S.C., Bruns, R.F., et al. Cardiac functional responses to adenosine by PD 81,723, an allosteric enhancer of the adenosine A₁ receptor. Am. J. Physiol. 264(3 Pt 2), H1017-H1022 (1993).

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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