

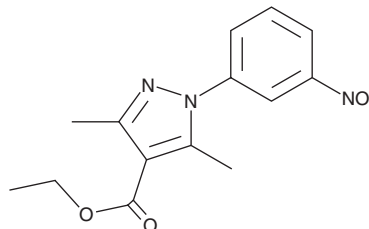
PRODUCT INFORMATION



Phosphodiesterase 4 Inhibitor

Item No. 21191

CAS Registry No.: 346440-86-6
Formal Name: 3,5-dimethyl-1-(3-nitrophenyl)-1H-pyrazole-4-carboxylic acid, ethyl ester
Synonym: PDE4 Inhibitor
MF: C₁₄H₁₅N₃O₄
FW: 289.3
Purity: ≥98%
UV/Vis.: λ_{max}: 250 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

Phosphodiesterase 4 (PDE4) inhibitor is supplied as a crystalline solid. A stock solution may be made by dissolving the PDE4 inhibitor in the solvent of choice. PDE4 inhibitor is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of PDE4 inhibitor in ethanol is approximately 5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

PDE4 inhibitor is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PDE4 inhibitor should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. PDE4 inhibitor has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PDE4 inhibitor is an inhibitor of PDE4 with an IC₅₀ value of 0.10 μM for the human recombinant enzyme.¹

Reference

1. Martins, T.J., Fowler, K.W., Hertel, C.C., *et al.* Cyclic AMP-specific phosphodiesterase inhibitors. **US20030236412A1** (2003).

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.

WARRANTY AND LIMITATION OF REMEDY

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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