

PRODUCT INFORMATION

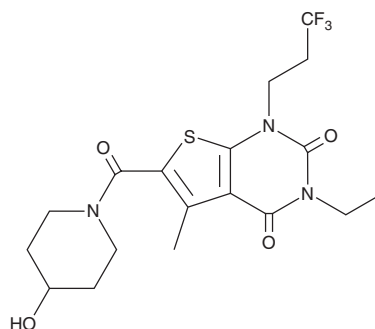


BAY-545

Item No. 28420

CAS Registry No.: 1699717-32-2
Formal Name: 3-ethyl-6-[(4-hydroxy-1-piperidinyl)carbonyl]-5-methyl-1-(3,3,3-trifluoropropyl)-thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione

MF: C₁₈H₂₂F₃N₃O₄S
FW: 433.4
Purity: ≥95%
UV/Vis.: λ_{max}: 231, 286 nm
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

BAY-545 is supplied as a solid. A stock solution may be made by dissolving the BAY-545 in the solvent of choice, which should be purged with an inert gas. BAY-545 is soluble in the organic solvent DMSO at a concentration of approximately 150 mg/ml.

Description

BAY-545 is an adenosine A_{2B} receptor antagonist.¹ It is selective for adenosine A_{2B} receptors over A₁, A_{2A}, and A₃ receptors with IC₅₀ values of 66, 1,300, 820, and >6,700 nM, respectively, in CHO cell membranes expressing human recombinant receptors. BAY-545 reduces increases in the levels of IL-6 induced by the adenosine receptor agonist 5'-(N-ethylcarbamoyl)adenosine (NECA; Item No. 21420) in LL29 fibroblast cells (IC₅₀ = 185 nM). It decreases FITC-induced increases in the levels of IL-6 in lung homogenates and cell numbers in bronchoalveolar lavage fluid (BALF) and reduces silica-induced increases in the levels of TGF-β1 in lung homogenates, but not cell numbers in BALF, in mouse models of pulmonary fibrosis when administered at a dose of 500 mg/kg.

Reference

1. Harter, M., Kalthof, B., Delbeck, M., *et al.* Novel non-xanthine antagonist of the A_{2B} adenosine receptor: From HTS hit to lead structure. *Eur. J. Med. Chem.* **163**, 763-778 (2019).

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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