

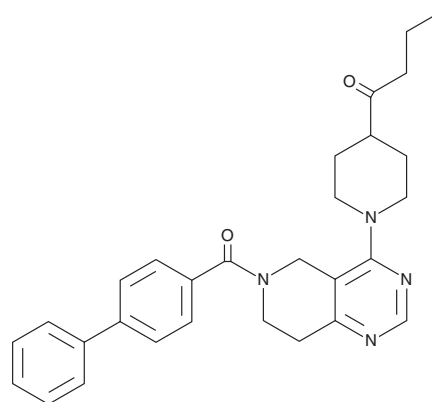
PRODUCT INFORMATION



PK-THPP

Item No. 29473

CAS Registry No.: 1332454-07-5
Formal Name: 1-[1-[6-([1,1'-biphenyl]-4-ylcarbonyl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yl]-4-piperidinyl]-1-butanone
MF: C₂₉H₃₂N₄O₂
FW: 468.6
Purity: ≥98%
UV/Vis.: λ_{max}: 264 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

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

Description

PK-THPP is a brain-penetrant inhibitor of the two-pore domain potassium channel K_{2p}9.1/TASK-3 (IC₅₀ = 0.035 μM).¹ It is selective for K_{2p}9.1/TASK-3 over K_{2p}2.1/TREK1 and the voltage-gated potassium channel subtype K_v1.5 (IC₅₀s = ~5 and >10 μM, respectively), as well as a panel of more than 100 receptors, ion channels, and enzymes at 10 μM but does inhibit K_{2p}3.1/TASK-1 (IC₅₀ = 0.3 μM). PK-THPP (100 mg/kg, s.c.) increases the time spent awake and decreases the duration of rapid eye movement (REM) and delta sleep in mice.

Reference

1. Coburn, C.A., Luo, Y., Cui, M., *et al.* Discovery of a pharmacologically active antagonist of the two-pore-domain potassium channel K_{2p}9.1 (TASK-3). *ChemMedChem* **7**(1), 123-133 (2012).

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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