

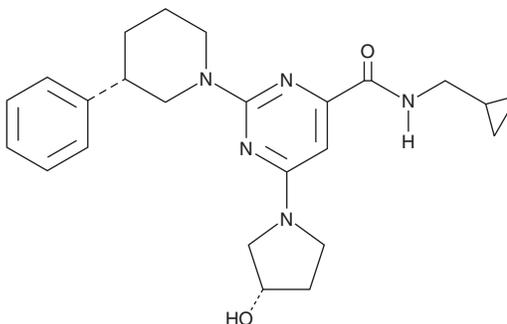
PRODUCT INFORMATION



LEI-401

Item No. 31108

CAS Registry No.: 2393840-15-6
Formal Name: N-(cyclopropylmethyl)-6-[(3S)-3-hydroxy-1-pyrrolidinyl]-2-[(3S)-3-phenyl-1-piperidinyl]-4-pyrimidinecarboxamide
MF: C₂₄H₃₁N₅O₂
FW: 421.5
Purity: ≥98%
UV/Vis.: λ_{max}: 231 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

LEI-401 is supplied as a crystalline solid. A stock solution may be made by dissolving the LEI-401 in the solvent of choice, which should be purged with an inert gas. LEI-401 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of LEI-401 in these solvents is approximately 5 and 10 mg/ml, respectively.

LEI-401 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, LEI-401 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. LEI-401 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

LEI-401 is an inhibitor of N-acyl phosphatidylethanolamine phospholipase D (NAPE-PLD; IC₅₀ = 0.86 μM in HEK293T cell membranes expressing the recombinant human enzyme).¹ It is selective for NAPE-PLD over human cannabinoid (CB) receptor 1 (CB₁), CB₂, type IVE phospholipase A₂, monoacylglycerol lipase (MAGL), and diacylglycerol lipase α (DAGLα), as well as mouse DAGLα, DAGLβ, fatty acid amide hydrolase (FAAH), and α/β-hydrolase domain-containing protein 6 (ABHD6), at 10 μM. LEI-401 (10 μM) reduces levels of a variety of N-acylethanolamines (NAEs), including N-palmitoylethanolamine (PEA), N-oleoylethanolamine (OEA), and N-arachidonylethanolamine (AEA; Item No. 90050), in Neuro2a cells. It impairs fear extinction in a cued fear conditioning test in mice when administered at a dose of 30 mg/kg.

Reference

1. Mock, E.D., Mustafa, M., Gunduz-Cinar, O., *et al.* Discovery of a NAPE-PLD inhibitor that modulates emotional behavior in mice. *Nat. Chem. Biol.* **16**(6), 667-675 (2020).

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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