

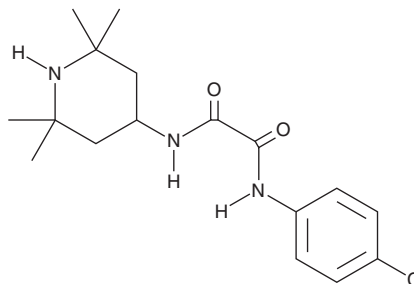
PRODUCT INFORMATION



NBD-556

Item No. 21274

CAS Registry No.: 333353-44-9
Formal Name: N¹-(4-chlorophenyl)-N²-(2,2,6,6-tetramethyl-4-piperidinyloxy)-ethanediamide
MF: C₁₇H₂₄ClN₃O₂
FW: 337.8
Purity: ≥98%
UV/Vis.: λ_{max}: 271 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

NBD-556 is supplied as a crystalline solid. A stock solution may be made by dissolving the NBD-556 in the solvent of choice, which should be purged with an inert gas. NBD-556 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of NBD-556 in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

NBD-556 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, NBD-556 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. NBD-556 has a solubility of approximately 30 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

NBD-556 is a small molecule CD4 mimetic that inhibits GP120 from interacting with CD4, preventing HIV-1 from entering CD4⁺ cells by binding to the GP120 exterior envelope glycoprotein.¹ It inhibits infection of MT-2 cells by laboratory-adapted HIV-1 IIIB, MN, and V32 strains (IC₅₀ = 6.5, 15.9, and 5.3 μM, respectively), an AZT-resistant (AZT-R) HIV-1 strain (IC₅₀ = 58 μM), and various primary HIV-1 isolates (IC₅₀s = 15-103 μM).

Reference

1. Zhao, Q., Ma, L., Jiang, S., *et al.* Identification of N-phenyl-N'-(2,2,6,6-tetramethyl-piperidin-4-yl)-oxalamides as a new class of HIV-1 entry inhibitors that prevent gp120 binding to CD4. *Virology* **339**(2), 213-225 (2005).

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.

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