

PRODUCT INFORMATION



BMS 502

Item No. 39303

CAS Registry No.: 2407854-18-4
Formal Name: 8-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-5,6-dihydro-5-methyl-7-nitro-6-oxo-1,5-naphthyridine-2-carbonitrile

MF: C₂₇H₂₂F₂N₆O₃

FW: 516.5

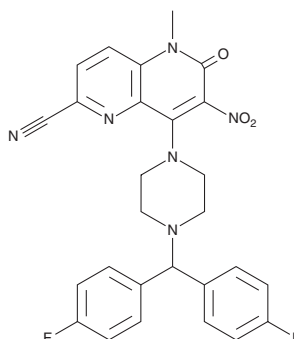
Purity: ≥98%

UV/Vis.: λ_{max}: 232 nm

Supplied as: A solid

Storage: -20°C

Stability: ≥3 years



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

Laboratory Procedures

BMS 502 is supplied as a solid. A stock solution may be made by dissolving the BMS 502 in the solvent of choice, which should be purged with an inert gas. BMS 502 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility BMS 502 in these solvents is approximately 1 and 10 mg/ml, respectively.

Description

BMS 502 is an inhibitor of diacylglycerol kinase α (DGK- α), DGK- ζ , and DGK- ι (IC₅₀s = 0.0046, 0.0021, and 0.0026 μ M, respectively).¹ It is selective for these DGKs over DGK- β , DGK- γ , and DGK- κ (IC₅₀s = 1, 0.68, and 4.6 μ M, respectively). BMS 502 increases levels of IFN- γ and phosphorylation of ERK in isolated human whole blood (EC₅₀s = 0.28 and 0.52 μ M, respectively). It also increases the proliferation of CD8⁺ T cells (EC₅₀ = 0.065 μ M), which express DGK- α and DGK- ζ but not DGK- ι . BMS 502 (0.3-10 mg/kg) increases the frequency of CD69⁺CD8⁺ T cells when administered in combination with the peptide antigen SIINFEKL in OT I mice, which express modified murine T cell receptors that recognize SIINFEKL.

Reference

1. Chupak, L., Wichroski, M., Zheng, X., *et al.* Discovery of potent, dual-inhibitors of diacylglycerol kinases alpha and zeta guided by phenotypic optimization. *ACS Med. Chem. Lett.* **14**(7), 929-935 (2023).

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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