

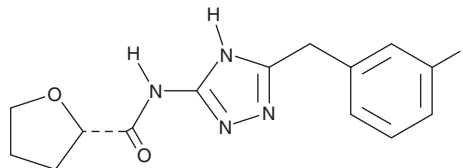
PRODUCT INFORMATION



GWP-042

Item No. 44848

CAS Registry No.: 1645486-93-6
Formal Name: (2S)-N-[3-[(3-fluorophenyl)methyl]-1H-1,2,4-triazol-5-yl]tetrahydro-2-furancarboxamide
MF: C₁₄H₁₅FN₄O₂
FW: 290.3
Purity: ≥95%
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

GWP-042 is supplied as a solid. A stock solution may be made by dissolving the GWP-042 in the solvent of choice, which should be purged with an inert gas. GWP-042 is soluble (≥10 mg/ml) in DMSO.

Description

GWP-042 is an inhibitor of the mycobacterial alanine dehydrogenase and virulence factor Rv2780 (IC₅₀ = 0.21 μM).¹ It inhibits the production of the antimicrobial peptides β-defensin-4 and cathelicidin antimicrobial peptide (Camp) and reduces intracellular survival of *M. tuberculosis* in isolated and infected mouse peritoneal macrophages, but does not inhibit the growth of *M. tuberculosis* in a host cell-free assay. *In vivo*, GWP-042 (10 mg/kg per day) reduces lung bacterial burden in *M. tuberculosis*-infected mice.

Reference

1. Peng, C., Cheng, Y., Ma, M., *et al.* *Mycobacterium tuberculosis* suppresses host antimicrobial peptides by dehydrogenating L-alanine. *Nat. Commun.* **15**(1), 4216 (2024).

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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