

PRODUCT INFORMATION

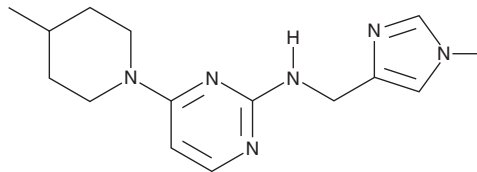


TP-040

Item No. 41375

CAS Registry No.: 2757254-99-0
Formal Name: N-[(1-methyl-1H-imidazol-4-yl)methyl]-4-(4-methyl-1-piperidiny)-2-pyrimidinamine
Synonyms: O-GlcNAcase-IN-1, O-GlcNAcase Inhibitor 1, OGA-IN-1, OGA Inhibitor 1

MF: C₁₅H₂₂N₆
FW: 286.4
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

TP-040 is supplied as a solid. A stock solution may be made by dissolving the TP-040 in the solvent of choice, which should be purged with an inert gas. TP-040 is sparingly soluble (1-10 mg/ml) in DMSO and chloroform and slightly soluble (0.1-1 mg/ml) in acetonitrile and methanol.

Description

TP-040 is an O-GlcNAcase (OGA) inhibitor ($IC_{50} = 46$ nM).¹ It is selective for OGA over β -hexosaminidase ($IC_{50} = >10$ μ M) and a panel of 277 kinases (IC_{50} s = >1 μ M for all). TP-040 increases the levels of O-GlcNAcylated proteins in SH-SY5Y neuroblastoma cells ($EC_{50} = 450$ nM).

Reference

1. Tawada, M., Fushimi, M., Masuda, K., *et al.* Discovery of a novel and brain-penetrant O-GlcNAcase inhibitor via virtual screening, structure-based analysis, and rational lead optimization. *J. Med. Chem.* **64**(2), 1103-1115 (2021).

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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