

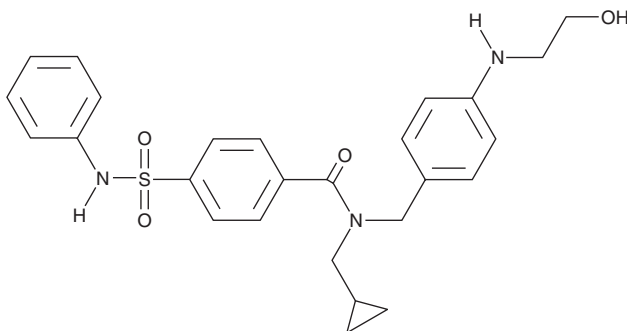
PRODUCT INFORMATION



MDI-114215

Item No. 42919

Formal Name: N-(cyclopropylmethyl)-N-(4-((2-hydroxyethyl)amino)benzyl)-4-(N-phenylsulfamoyl)benzamide
MF: C₂₆H₂₉N₃O₄S
FW: 479.6
Purity: ≥97%
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

MDI-114215 is supplied as a solid. A stock solution may be made by dissolving the MDI-114215 in the solvent of choice, which should be purged with an inert gas. MDI-114215 is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

MDI-114215 is an allosteric inhibitor of LIM kinase 1 (LIMK1) and LIMK2 (IC₅₀s = 19.95 and 26.92 nM, respectively).¹ It is selective for LIMK1 and LIMK2 in a panel of 468 kinases but does bind to cyclin-dependent kinase 7 (Cdk7), MAP kinase kinase 7 (MKK7), vaccinia-related kinase 2 (VRK2), and phosphorylated Abl1 at 300 nM. MDI-114215 is also selective for LIMK1 and LIMK2 in a panel of 44 receptors, ion channels, transporters, and enzymes but does bind to cannabinoid 1 (CB₁) receptor at 10 μM. It reduces the levels of cofilin phosphorylated by p21-activated kinase 1 (PAK1) in SH-SY5Y cells (IC₅₀ = 50.12 nM). MDI-114215 (3 μM) enhances long-term potentiation (LTP) in hippocampal slices from *Fmr1* knockout mice, which lack the gene encoding fragile X mental retardation 1 protein (FMRP).

Reference

1. Baldwin, A.G., Foley, D.W., Collins, R., *et al.* Discovery of MDI-114215: A potent and selective LIMK inhibitor to treat Fragile X Syndrome. *J. Med. Chem.* **68**(1), 719-752 (2025).

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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