

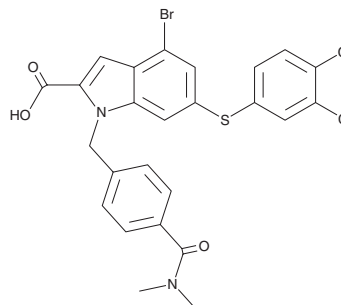
PRODUCT INFORMATION



Rheb Inhibitor NR1

Item No. 43360

CAS Registry No.: 2216763-38-9
Formal Name: 4-bromo-6-[(3,4-dichlorophenyl)thio]-1-[[4-[(dimethylamino)carbonyl]phenyl]methyl]-1H-indole-2-carboxylic acid
MF: C₂₅H₁₉BrCl₂N₂O₃S
FW: 578.3
Purity: ≥98%
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

Rheb inhibitor NR1 is supplied as a solid. A stock solution may be made by dissolving the Rheb inhibitor NR1 in the solvent of choice, which should be purged with an inert gas. Rheb inhibitor NR1 is slightly soluble (0.1-1 mg/ml) in DMSO.

Description

Rheb inhibitor NR1 is an inhibitor of Ras homolog enriched in brain (Rheb).¹ It inhibits Rheb-dependent mTORC1 activity (IC₅₀ = 2.1 μM). It selectively inhibits Rheb-dependent mTORC1 activity over Rheb-independent mTORC1 activity, mTORC2, Ras, and Rap1 at 30 μM. Rheb inhibitor NR1 (10 μM) decreases the size of Jurkat T cells and inhibits protein synthesis in MCF-7 breast cancer cells. *In vivo*, Rheb inhibitor NR1 (30 mg/kg) inhibits the phosphorylation of the mTORC1 substrates S6 and 4E-BP1 in mouse skeletal muscle and kidneys.

Reference

1. Mahoney, S.J., Narayan, S., Molz, L., *et al.* A small molecule inhibitor of Rheb selectively targets mTORC1 signaling. *Nat. Commun.* **9**(1), 548 (2018).

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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