

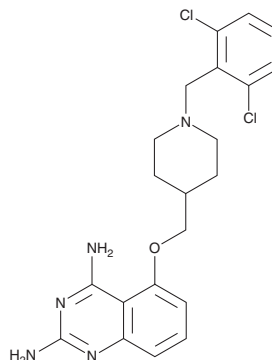
PRODUCT INFORMATION



RG3039

Item No. 36589

CAS Registry No.: 1005504-62-0
Formal Name: 5-[[1-[(2,6-dichlorophenyl)methyl]-4-piperidinyl]methoxy]-2,4-quinazolinediamine
MF: C₂₁H₂₃Cl₂N₅O
FW: 432.4
Purity: ≥98%
UV/Vis.: λ_{max}: 222, 244 nm
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

RG3039 is supplied as a solid. A stock solution may be made by dissolving the RG3039 in the solvent of choice, which should be purged with an inert gas. RG3039 is soluble in the organic solvent DMSO.

Description

RG3039 is an inhibitor of mRNA decapping scavenger enzyme (DcpS; IC₅₀ = 0.069 nM).¹ It prevents denervation of the neuromuscular junction (NMJ) and decreases in NMJ synaptic transmission and myofiber size of the longissimus muscle in a mouse model of spinal muscular atrophy (SMA) induced by knockout of the gene encoding survival motor neuron 1 (*Smn1*) when administered at a dose of 10 mg/kg.² RG3039 improves survival and motor function in the same model.

References

1. Gopalsamy, A., Narayanan, A., Liu, S., *et al.* Design of potent mRNA decapping scavenger enzyme (DcpS) inhibitors with improved physicochemical properties to investigate the mechanism of therapeutic benefit in spinal muscular atrophy (SMA). *J. Med. Chem.* **60**(7), 3094-3108 (2017).
2. Van Meerbeke, J.P., Gibbs, R.M., Plasterer, H.L., *et al.* The DcpS inhibitor RG3039 improves motor function in SMA mice. *Hum. Mol. Genet.* **22**(20), 4074-4083 (2013).

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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