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Neuronal Differentiation Inducer III

ALTERNATE NAME: N-cyclopropyl-5-thiophen-2-yl-1,2-oxazole-3-carboxamide; ISX-9

CATALOG #: AUR10664

STRUCTURE:

MOLECULAR FORMULA: C₁₁H₁₀N₂O₂S

MOLECULAR WEIGHT: 234.3

CAS#: 832115-62-5

APPEARANCE: Off-white solid

SOLUBILITY: DMSO (5 mg/ml) or EtOH (3 mg/ml)

PURITY: >97% by HPLC

STORAGE: Store at +2°C to +8°C; Protect from air and light

DESCRIPTION: Neuronal Differentiation Inducer III selectively induces robust neuronal differentiation (Effective concentration = $20 \mu M$) in various stem/progenitor cells. The underlying excitation-neurogenesis signaling is comprised of, at least in part, an initial NMDA receptor- and L-type channel-mediated Ca²⁺ influx, followed by an activation of CaMKII, phosphorylation/nuclear export of the MEF2 repressor HDAC5, the subsequent de-repression of MEF2, and the eventual activation of the HDAC-MEF2 epigenetic/transcriptional regulatory network.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure