

PRODUCT INFORMATION

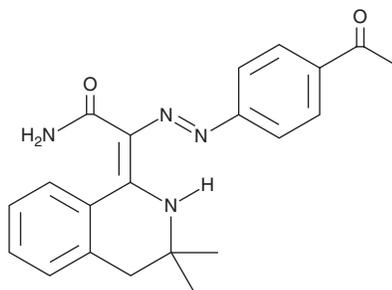


IQ-1

Item No. 16153

CAS Registry No.: 331001-62-8
Formal Name: 2-[2-(4-acetylphenyl)diazenyl]-2-(3,4-dihydro-3,3-dimethyl-1(2H)-isoquinolinylidene)-acetamide

MF: C₂₁H₂₂N₄O₂
FW: 362.4
Purity: ≥98%
UV/Vis.: λ_{max}: 230, 248, 368 nm
Supplied as: A crystalline 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

IQ-1 is supplied as a crystalline solid. A stock solution may be made by dissolving the IQ-1 in the solvent of choice, which should be purged with an inert gas. IQ-1 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of IQ-1 in these solvents is approximately 10, 25, and 30 mg/ml, respectively.

Description

IQ-1 is a cell-permeable tetrahydroisoquinolinylidene compound that maintains long-term mouse embryonic stem cell (ESC) pluripotency.¹ When used at 4 µg/ml with Wnt3a, it allows ESCs to form embryoid bodies that continue to express markers of pluripotency, including α-fetoprotein and β-III tubulin.¹ IQ-1 blocks the interaction of the protein Naked cuticle with a subunit of the protein phosphatase PP2A, altering signaling through Wnt/β-catenin and maintaining the expression of stem cell markers Oct4, Nanog, and Rex1 in ESCs.¹

Reference

1. Miyabayashi, T., Teo, J.L., Yamamoto, M., *et al.* Wnt/β-catenin/CBP signaling maintains long-term murine embryonic stem cell pluripotency. *Proc. Natl. Acad. Sci. USA* **104**(13), 5668-5673 (2007).

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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