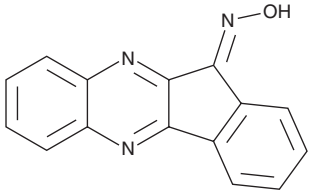
PRODUCT INFORMATION

IQ-1S (free acid)

Item No. 29851

CAS Registry No.: 23146-22-7
Formal Name: 11H-indeno[1,2-b]quinoxalin-11-one, oxime
Synonym: IQ-1
MF: $C_{15}H_9N_3O$
FW: 247.3
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

IQ-1S (free acid) is supplied as a solid. A stock solution may be made by dissolving the IQ-1S (free acid) in the solvent of choice, which should be purged with an inert gas. IQ-1S (free acid) is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of IQ-1S (free acid) in these solvents is approximately 10 and 15 mg/ml, respectively.

IQ-1S (free acid) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, IQ-1S (free acid) should first be dissolved in DMF and then diluted with the aqueous buffer of choice. IQ-1S (free acid) has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

IQ-1S (free acid) is an inhibitor of NF-κB/AP-1 (IC_{50} = 2.3 µM in a reporter assay).[1] It inhibits TNF-α and IL-6 production in human Mono-Mac-6 cells (IC_{50}s = 1.3 and 3.8 µM, respectively) and isolated human peripheral blood mononuclear cells (PBMCs; IC_{50}s = 2.6 and 5.6 µM, respectively), as well as nitric oxide (NO) production in murine J774-A.1 macrophages (IC_{50} = 3.1 µM). IQ-1S (free acid) binds to JNKs (K_d = 0.24, 0.36, and 0.1 µM for JNK1-3), as well as casein kinase 1δ (CK1δ), PI3Kγ, and MAPK-interacting serine/threonine kinase 2 (MKNK2; K_ds = 0.38, 0.47, and 0.92 µM, respectively).

Reference

1. Schepetkin, I.A., Kirpotina, L.N., Khlebnikov, A.I., *et al.* Identification and characterization of a novel class of c-Jun N-terminal kinase inhibitors. *Mol. Pharmacol.* **81(6)**, 832-845 (2012).

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