PRODUCT INFORMATION



IQ-1S (free acid)

Item No. 29851

CAS Registry No.: 23146-22-7

11H-indeno[1,2-b]quinoxalin-11-Formal Name:

one, oxime

Synonym: IQ-1 MF: $C_{15}H_{9}N_{3}O$ 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 (IC₅₀ = 3.1 μ M). IQ-1S (free acid) binds to JNKs ($K_d = 0.24$, 0.36, and 0.1 μ M for JNK1-3), as well as casein kinase 1 δ (CK1 δ), PI3K γ , and MAPK-interacting serine/threonine kinase 2 (MKNK2; $K_ds = 0.38$, 0.47, and 0.92 μ M, 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).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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