PRODUCT INFORMATION



SI-2

Item No. 19565

CAS Registry No.: 380537-35-9

(1E)-1-(2-pyridinyl)-ethanone-2-(1-Formal Name:

methyl-1H-benzimidazol-2-yl)hydrazone

Synonym: MF: $C_{15}H_{15}N_5$ 265.3 FW: ≥98% **Purity:**

UV/Vis.: λ_{max} : 218, 369 nm Supplied as: A crystalline solid

Storage: -20°C Stability: ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



SI-2 is supplied as a crystalline solid. A stock solution may be made by dissolving the SI-2 in the solvent of choice, which should be purged with an inert gas. SI-2 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SI-2 in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

SI-2 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SI-2 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. SI-2 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

SI-2 is an inhibitor of steroid receptor coactivator 3 (SRC-3). It has been shown to selectively reduce the transcriptional activities and the protein concentrations of SRC-3 in cells through direct physical interactions with SRC-3. 1 SI-2 induces death in various breast cancer cells with IC₅₀ values of 3-20 nM without affecting normal cell viability. At 2 mg/kg, SI-2 can also inhibit primary tumor growth and reduce SRC-3 protein levels in an MDA-MB-468 breast cancer mouse model.

Reference

1. Song, X., Chen, J., Zhao, M., et al. Development of potent small-molecule inhibitors to drug the undruggable steroid receptor coactivator-3. Proc. Natl. Acad. Sci. USA 113(18), 4970-4975 (2016).

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.

WARRANTY AND LIMITATION OF REMEDY

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