

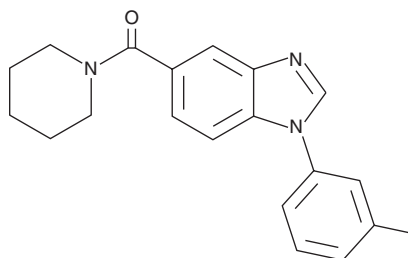
PRODUCT INFORMATION



ML-148

Item No. 20475

CAS Registry No.: 451496-96-1
Formal Name: [1-(3-methylphenyl)-1H-benzimidazol-5-yl]-1-piperidinyl-methanone
MF: $C_{20}H_{21}N_3O$
FW: 319.4
Purity: $\geq 98\%$
UV/Vis.: λ_{\max} : 213, 242 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

ML-148 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-148 in the solvent of choice, which should be purged with an inert gas. ML-148 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ML-148 in these solvents is approximately 10, 5, and 25 mg/ml, respectively.

ML-148 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ML-148 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. ML-148 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ML-148 is an inhibitor of 15-hydroxy prostaglandin dehydrogenase (15-PGDH) with an IC_{50} value of 56 nM.¹ It demonstrates selectivity for 15-PGDH when profiled across a panel of related dehydrogenase or reductase enzymes.¹

Reference

1. Niesen, F.H., Schultz, L., Jadhav, A., *et al.* High-affinity inhibitors of human NAD^+ -dependent 15-hydroxyprostaglandin dehydrogenase: Mechanisms of inhibition and structure-activity relationships. *PLoS One* **5**(11), e13719 (2010).

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.

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