

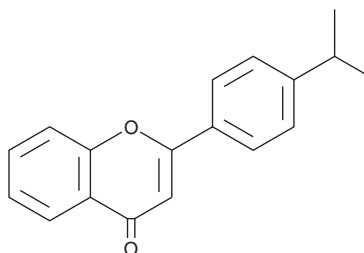
PRODUCT INFORMATION



MN-64

Item No. 17635

CAS Registry No.: 92831-11-3
Formal Name: 2-[4-(1-methylethyl)phenyl]-4H-1-benzopyran-4-one
MF: C₁₈H₁₆O₂
FW: 264.3
Purity: ≥98%
UV/Vis.: λ_{max}: 255, 300 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

MN-64 is supplied as a crystalline solid. A stock solution may be made by dissolving the MN-64 in the solvent of choice, which should be purged with an inert gas. MN-64 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of MN-64 in ethanol and DMF is approximately 30 mg/ml and approximately 50 mg/ml in DMSO.

MN-64 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, MN-64 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. MN-64 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Tankyrases (TNKS) are poly-ADP-ribosyltransferases, which cleave NAD⁺ to produce nicotinamide and ADP-ribose, which is then covalently attached to an acceptor protein in a process known as poly(ADP-ribosylation). MN-64 is a potent inhibitor of TNKS1 and TNKS2 (IC₅₀s = 6 and 72 nM, respectively).¹ It is ineffective against several poly(ADP-ribosyl) polymerases (IC₅₀ > 19 μM). Through its effects on TNKS, MN-64 inhibits signaling along the Wnt/β-catenin pathway in a cell-based reporter assay.^{1,2}

References

1. Narwal, M., Koivunen, J., Haikarainen, T., *et al.* Discovery of tankyrase inhibiting flavones with increased potency and isoenzyme selectivity. *J. Med. Chem.* **56**(20), 7880-7889 (2013).
2. Haikarainen, T., Krauss, S., and Lehtiö, L. Tankyrases: Structure, function, and therapeutic implications in cancer. *Curr. Pharm. Des.* **20**, 6472-6488 (2014).

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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