

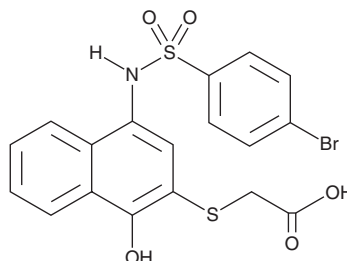
PRODUCT INFORMATION



UMI-77

Item No. 19148

CAS Registry No.: 518303-20-3
Formal Name: 2-[[4-[[[4-bromophenyl)sulfonyl]amino]-1-hydroxy-2-naphthalenyl]thio]-acetic acid
MF: C₁₈H₁₄BrNO₅S₂
FW: 468.3
Purity: ≥98%
UV/Vis.: λ_{max}: 223, 237, 307 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

UMI-77 is supplied as a crystalline solid. A stock solution may be made by dissolving the UMI-77 in the solvent of choice, which should be purged with an inert gas. UMI-77 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of UMI-77 in these solvents is approximately 5, 0.5, and 2 mg/ml, respectively.

UMI-77 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, UMI-77 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. UMI-77 has a solubility of approximately 0.11 mg/ml in a 1:8 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Myeloid cell leukemia-1 (Mcl-1) is a potent anti-apoptotic protein and a member of the pro-survival Bcl-2 family. UMI-77 is a selective Mcl-1 inhibitor with a K_i value of 490 nM and exhibits selectivity over other members of the Bcl-2 family (K_is = 5.3, 23.8, 33.0, and 8.2 μM) for A1/Bfl-1, Bcl-2, Bcl-xL, and Bcl-W, respectively).¹ It has been shown to disrupt the heterodimerization of Mcl-1/Bax and Mcl-1/Bak, thus antagonizing Mcl-1 function.¹ UMI-77 inhibits the growth of various pancreatic cancer cell lines with IC₅₀s values ranging from 3.4-16.1 μM, inducing apoptosis through activation of the intrinsic apoptotic pathway and/or Bax conformational change.¹ In a BxPC-3 xenograft mouse model, 60 mg/kg UMI-77 demonstrated antitumor activity without damaging normal tissues.¹

Reference

1. Abulwerdi, F., Liao, C., Liu, M., *et al.* A novel small-molecule inhibitor of mcl-1 blocks pancreatic cancer growth *in vitro* and *in vivo*. *Mol. Cancer Ther.* **13**(3), 565-575 (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.

WARRANTY AND LIMITATION OF REMEDY

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