

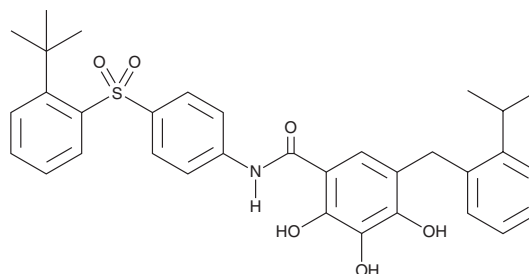
PRODUCT INFORMATION



TW-37

Item No. 20999

CAS Registry No.: 877877-35-5
Formal Name: N-[4-[[2-(1,1-dimethylethyl)phenyl]sulfonyl]phenyl]-2,3,4-trihydroxy-5-[[2-(1-methylethyl)phenyl]methyl]-benzamide
MF: C₃₃H₃₅NO₆S
FW: 573.7
Purity: ≥98%
UV/Vis.: λ_{max}: 303 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

TW-37 is supplied as a crystalline solid. A stock solution may be made by dissolving the TW-37 in the solvent of choice. TW-37 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of TW-37 in these solvents is approximately 0.2, 15, and 25 mg/ml, respectively.

TW-37 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, TW-37 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. TW-37 has a solubility of approximately 0.33 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

TW-37 is an inhibitor of the Bcl-2 family proteins Bcl-2, Mcl-1, and Bcl-xL (K_s = 120, 260, and 1,100 nM, respectively).^{1,2} It induces apoptosis, inhibits migration and capillary sprouting, and blocks the expression of the angiogenic chemokines CXCL1 and CXCL8 in endothelial cells.² TW-37 decreases the density of functional human microvessels in the severe combined immunodeficient mouse model of human angiogenesis when administered intravenously.² It has apoptotic action against leukemia, lymphoma, and pancreatic cancer cells.³

References

1. Verhaegen, M., Bauer, J.A., de la Vega, C.M., *et al.* A novel BH3 mimetic reveals a mitogen-activated protein kinase-dependent mechanism of melanoma cell death controlled by p53 and reactive oxygen species. *Cancer Res.* **66(23)**, 11348-11359 (2006).
2. Zeitlin, B.D., Joo, E., Dong, Z., *et al.* Antiangiogenic effect of TW37, a small-molecule inhibitor of Bcl-2. *Cancer Res.* **66(17)**, 8698-8706 (2006).
3. Azmi, A.S. and Mohammad, R.M. Non-peptidic small molecule inhibitors against Bcl-2 for cancer therapy. *J. Cell Physiol.* **218(1)**, 13-21 (2009).

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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