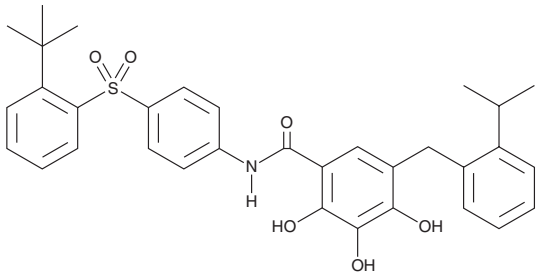
PRODUCT INFORMATION

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:	$C_{33}H_{35}NO_6S$
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_is = 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).

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