

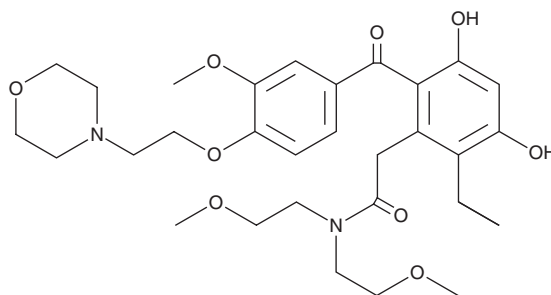
PRODUCT INFORMATION



KW 2478

Item No. 22418

CAS Registry No.: 819812-04-9
Formal Name: 2-ethyl-3,5-dihydroxy-N,N-bis(2-methoxyethyl)-6-[3-methoxy-4-[2-(4-morpholinyl)ethoxy]benzoyl]-benzeneacetamide
MF: C₃₀H₄₂N₂O₉
FW: 574.7
Purity: ≥98%
UV/Vis.: λ_{max}: 229, 281, 313 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

KW 2478 is supplied as a crystalline solid. A stock solution may be made by dissolving the KW 2478 in the solvent of choice, which should be purged with an inert gas. KW 2478 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of KW 2478 in these solvents is approximately 5 mg/ml.

KW 2478 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, KW 2478 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. KW 2478 has a solubility of approximately 0.125 mg/ml in a 1:7 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

KW 2478 is an inhibitor of heat shock protein 90 (Hsp90; IC₅₀ = 3.8 nM for Hsp90α).¹ It inhibits the growth of OPM-2/GFP, KMS011, RPMI 8226, and NCI-H929 multiple myeloma cells (GI₅₀s = 0.3, 0.34, 0.39, and 0.12 μM, respectively) and Raji, SR, and SC-1 non-Hodgkin's lymphoma cells (GI₅₀s = 0.39, 0.098, and 0.33 μM, respectively). KW 2478 decreases expression of the Hsp90 client proteins IGF-IRβ and c-RAF-1 and induces apoptosis in OPM-2/GFP and NCI-H929 cells. *In vivo*, KW 2478 (100 mg/kg) reduces IGF-IRβ, c-RAF-1, Cdk9, and phosphorylated ERK1/2 protein levels in tumor tissue and decreases tumor growth in an NCI-H929 mouse xenograft model.

Reference

1. Nakashima, T., Ishii, T., Tagaya, H., *et al.* New molecular and biological mechanism of antitumor activities of KW-2478, a novel nonansamycin heat shock protein 90 inhibitor, in multiple myeloma cells. *Clin. Cancer Res.* **16**(10), 2792-2802 (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.

WARRANTY AND LIMITATION OF REMEDY

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM