PRODUCT INFORMATION



DMH4

Item No. 27653

CAS Registry No.: 515880-75-8

Formal Name: 6-[4-[2-(4-morpholinyl)ethoxy]

phenyl]-3-phenyl-pyrazolo[1,5-a]

pyrimidine

MF: $C_{24}H_{24}N_4O_2$ 400.5 FW:

≥98% **Purity:**

UV/Vis.: λ_{max} : 290 nm

Supplied as: A 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

DMH4 is supplied as a solid. A stock solution may be made by dissolving the DMH4 in the solvent of choice, which should be purged with an inert gas. DMH4 is soluble in the organic solvent DMSO.

Description

DMH4 is an inhibitor of VEGF receptor 2 (VEGFR2; IC_{50} = 0.16 μ M in a cell-free assay) and a derivative of dorsomorphin (Item No. 11967).¹ It selectively inhibits VEGFR2 over activin receptor-like kinase 2 (ALK2), ALK5, and AMPK (IC₅₀s = 3.5, >30, and 8 μ M, respectively, in a cell-free assay). DMH4 inhibits growth of H460 and A549 human lung cancer cells (GI_{50} s = 13.3 and 2.8 μ M, respectively) and reduces VEGF-induced tubule formation in human umbilical vein endothelial cells (HUVECs; $IC_{50} = 1 \mu M$).^{1,2}

References

- 1. Hao, J., Ho, J.N., Lewis, J.A., et al. In vivo structure activity relationship study of dorsomorphin analogs identifies selective VEGF and BMP inhibitors. ACS Chem. Biol. 5(2), 245-253 (2010).
- 2. Li, H., Ha, H.L., Ding, X., et al. DMH4, a VEGFR2 inhibitor, effectively suppresses growth and invasion of lung cancer cells. J. Appl. Biomed. 16(1), 46-50 (2018).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information Buyer agrees to purchase the material can be found on our website.

Copyright Cayman Chemical Company, 01/03/2023

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