

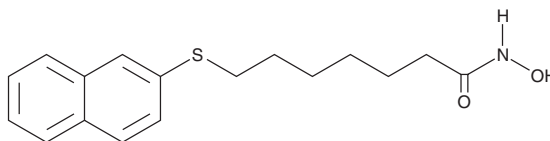
PRODUCT INFORMATION



HNHA

Item No. 13295

CAS Registry No.: 926908-04-5
Formal Name: N-hydroxy-7-(2-naphthalenylthio)-heptanamide
Synonym: Histone Deacetylase Inhibitor VI
MF: C₁₇H₂₁NO₂S
FW: 303.4
Purity: ≥98%
UV/Vis.: λ_{max}: 218, 254, 284 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

HNHA is supplied as a crystalline solid. A stock solution may be made by dissolving the HNHA in the solvent of choice, which should be purged with an inert gas. HNHA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of HNHA in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

HNHA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, HNHA should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. HNHA has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

HNHA is a cell-permeable inhibitor of histone deacetylase (HDAC) activity (IC₅₀ = 100 nM).¹ In human fibrosarcoma HT1080 cells, it induces histone hyperacetylation and p21 transcription with concomitant inhibition of cell cycle progression (IC₅₀ ~7.5 μM).¹ HNHA is at least as effective as SAHA in inhibiting tumor growth in a murine xenograph model *in vivo*.¹ HNHA also blocks the growth of human umbilical vein endothelial cells (HUVECs) and prevents tube formation and migration of HUVECs in response to vascular endothelial growth factor (VEGF). It also blocks retinal neovascularization and choroidal angiogenesis in mice.²

References

1. Kim, D.H., Lee, J., Kim, K.N., *et al.* Anti-tumor activity of N-hydroxy-7-(2-naphthylthio) heptanamide, a novel histone deacetylase inhibitor. *Biochem. Biophys. Res. Commun.* **356**(1), 233-238 (2007).
2. Kim, J.H., Kim, J.H., Oh, M., *et al.* N-hydroxy-7-(2-naphthylthio) heptanamide inhibits retinal and choroidal angiogenesis. *Mol. Pharmacol.* **6**(2), 513-519 (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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