

PRODUCT INFORMATION

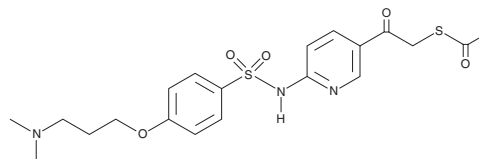


KD 5170

Item No. 13214

CAS Registry No.: 940943-37-3
Formal Name: ethanethioic acid S-[2-[6-[[[4-[3-(dimethylamino)propoxy]phenyl]sulfonyl]amino]-3-pyridinyl]-2-oxoethyl] ester

MF: C₂₀H₂₅N₃O₅S₂
FW: 451.6
Purity: ≥95%
UV/Vis.: λ_{max}: 243, 292 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

KD 5170 is supplied as a crystalline solid. A stock solution may be made by dissolving the KD 5170 in the solvent of choice, which should be purged with an inert gas. KD 5170 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of KD 5170 in these solvents is approximately 1 mg/ml.

KD 5170 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, KD 5170 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. KD 5170 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

KD 5170 is a mercaptoketone-based inhibitor of class I and II histone deacetylases (HDACs; IC₅₀s = 20, 2,060, 75, 26, 950, 14, 85, 2,500, 150, and 18 nM for HDAC1-10, respectively).¹ It exhibits broad spectrum antitumor activity *in vitro* and *in vivo*.¹⁻³ KD 5170 increases the acetylation of histones and activates caspases 3, 8, and 9, leading to apoptosis in primary myeloma cells.²

References

1. Hassig, C.A., Symons, K.T., Guo, X., *et al.* KD5170, a novel mercaptoketone-based histone deacetylase inhibitor that exhibits broad spectrum antitumor activity *in vitro* and *in vivo*. *Mol. Cancer Ther.* **7**(5), 1054-1065 (2008).
2. Feng, R., Ma, H., Hassig, C.A., *et al.* KD5170, a novel mercaptoketone-based histone deacetylase inhibitor, exerts antimyeloma effects by DNA damage and mitochondrial signaling. *Mol. Cancer Ther.* **7**(6), 1494-1505 (2008).
3. Payne, J.E., Bonnefous, C., Hassig, C.A., *et al.* Identification of KD5170: A novel mercaptoketone-based histone deacetylase inhibitor. *Bioorg. Med. Chem. Lett.* **18**(23), 6093-6096 (2008).

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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