

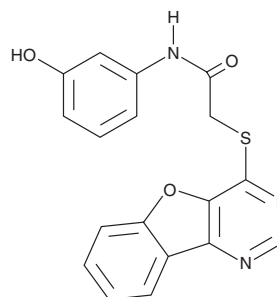
PRODUCT INFORMATION



CAY10721

Item No. 22403

CAS Registry No.: 848688-62-0
Formal Name: 2-(benzofuro[3,2-d]pyrimidin-4-ylthio)-N-(3-hydroxyphenyl)-acetamide
MF: C₁₈H₁₃N₃O₃S
FW: 351.4
Purity: ≥98%
UV/Vis.: λ_{max}: 211, 237, 293 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

CAY10721 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10721 in the solvent of choice, which should be purged with an inert gas. CAY10721 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CAY10721 in these solvents is approximately 30 mg/ml.

CAY10721 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10721 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CAY10721 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CAY10721 is an inhibitor of sirtuin 3 (SIRT3), a class III HDAC (39% SIRT3 inhibition at 200 μM).¹ Upregulation of SIRT3 transcription is associated with oral squamous cell carcinoma (OSCC) and breast cancer with lymph node involvement, while SIRT3 down-regulation inhibits the growth of OSCC cells and sensitizes them to radiation and chemotherapy.¹⁻³

References

1. Salo, H.S., Laitinen, T., Poso, A., *et al.* Identification of novel SIRT3 inhibitor scaffolds by virtual screening. *Bioorg. Med. Chem. Lett.* **23(10)**, 2990-2995 (2013).
2. Yan, S.M., Han, X., Han, P.J., *et al.* SIRT3 is a novel prognostic biomarker for esophageal squamous cell carcinoma. *Med. Oncol.* **31(8)** (2014).
3. Ashraf, N., Zino, S., MacIntyre, A., *et al.* Altered sirtuin expression is associated with node-positive breast cancer. *Br. J. Cancer.* **95(8)**, 1056-1061 (2006).

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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