

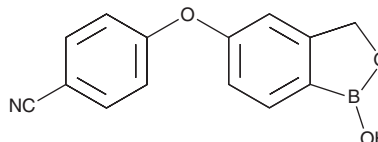
PRODUCT INFORMATION



AN2728

Item No. 21455

CAS Registry No.: 906673-24-3
Formal Name: 4-[(1,3-dihydro-1-hydroxy-2,1-benzoxaborol-5-yl)oxy]-benzonitrile
Synonym: Crisaborole
MF: C₁₄H₁₀BNO₃
FW: 251.1
Purity: ≥98%
UV/Vis.: λ_{max}: 251 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

AN2728 is supplied as a crystalline solid. A stock solution may be made by dissolving the AN2728 in the solvent of choice, which should be purged with an inert gas. AN2728 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of AN2728 in ethanol and DMSO is approximately 25 mg/ml and approximately 30 mg/ml in DMF.

AN2728 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AN2728 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AN2728 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

AN2728 is a boron-based, topical anti-inflammatory agent that inhibits phosphodiesterase 4 (PDE4; IC₅₀ = 0.11 μM).¹ It is less potent against PDE1A, PDE3A, and PDE7A (IC₅₀s = 6.12, 6.41, and 0.73 μM, respectively).¹ AN2728 suppresses the release of the proinflammatory cytokines TNF-α, IL-2, INF-γ, IL-5, and IL-10 with IC₅₀ values of 0.50, 0.59, 0.72, 2.25, and 2.58 μM, respectively.¹

Reference

1. Freund, Y.R., Akama, T., Alley, M.R.K. *et al.* Boron-based phosphodiesterase inhibitors show novel binding of boron to PDE4 bimetal center. *FEBS Lett.* **586**, 3410-3414 (2012).

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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