

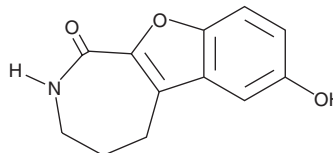
PRODUCT INFORMATION



CID-755673

Item No. 15924

CAS Registry No.: 521937-07-5
Formal Name: 2,3,4,5-tetrahydro-7-hydroxy-1H-benzofuro[2,3-c]azepin-1-one
MF: C₁₂H₁₁NO₃
FW: 217.2
Purity: ≥98%
UV/Vis.: λ_{max}: 218, 276, 321 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

CID-755673 is supplied as a crystalline solid. A stock solution may be made by dissolving the CID-755673 in the solvent of choice, which should be purged with an inert gas. CID-755673 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CID-755673 in ethanol is approximately 0.1 mg/ml and approximately 20 mg/ml in DMSO and DMF.

CID-755673 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CID-755673 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CID-755673 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

Protein kinase D (PKD) is a serine/threonine protein kinase that is activated by diacylglycerol, commonly downstream of PKC signaling.¹ The three human PKD isoforms target a variety of proteins to alter cell proliferation, survival, invasion, and protein transport. CID-755673 is a small molecule inhibitor of PKD (IC₅₀s = 182, 280, 227 nM for PKD1, 2, and 3, respectively) that exhibits higher selectivity for PKD over Akt, polo-like kinase 1, CDK activating kinase, CAMKII and three different PKC isoforms (IC₅₀s range from 15 to > 50 μM).² At 25 μM, CID-755673 has been shown to inhibit prostate cancer cell proliferation, cell migration, and invasion.²

References

1. Rozenfurt, E., Rey, O., and Waldron, R.T. Protein kinase D signaling. *J. Biol. Chem.* **280**(14), 13205-13208 (2005).
2. Sharlow, E.R., Giridhar, K.V., LaValle, C.R., *et al.* Potent and selective disruption of protein kinase D functionality by a benzoxoloazepinolone. *J. Biol. Chem.* **283**(48), 33516-33526 (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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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