

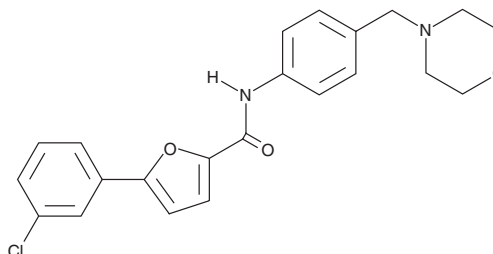
# PRODUCT INFORMATION



**CID-2011756**

Item No. 15317

**CAS Registry No.:** 638156-11-3  
**Formal Name:** 5-(3-chlorophenyl)-N-[4-(4-morpholinylmethyl)phenyl]-2-furancarboxamide  
**MF:** C<sub>22</sub>H<sub>21</sub>ClN<sub>2</sub>O<sub>3</sub>  
**FW:** 396.9  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 230, 315 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-2011756 is supplied as a crystalline solid. A stock solution may be made by dissolving the CID-2011756 in the solvent of choice, which should be purged with an inert gas. CID-2011756 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CID-2011756 in these solvents is approximately 0.1, 10, and 15 mg/ml, respectively.

CID-2011756 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CID-2011756 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CID-2011756 has a solubility of approximately 0.1 mg/ml in a 1:6 solution of DMF: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.<sup>1</sup> The three human PKD isoforms target a variety of proteins to alter cell proliferation, survival, invasion, and protein transport.<sup>1,2</sup> CID-2011756 is an inhibitor of all three PKD isoforms (IC<sub>50</sub>s = 3.2, 0.6, and 0.7 μM for PKD1, PKD2, and PKD3, respectively).<sup>2</sup> This ATP-competitive inhibitor is cell permeable, blocking the phosphorylation of PKD1 on Ser<sup>916</sup> (an autocatalytic target) in LNCaP prostate cancer cells in response to phorbol esters (EC<sub>50</sub> = 10 μM).<sup>2</sup>

## References

1. Rozengurt, E., Rey, O., and Waldron, R.T. Protein kinase D signaling. *J. Biol. Chem.* **280**(14), 13205-13208 (2005).
2. Sharlow, E.R., Mustata Wilson, G., Close, D., *et al.* Discovery of diverse small molecule chemotypes with cell-based PKD1 inhibitory activity. *PLoS One* **6**(10), e25134 (2011).

### 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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