

# PRODUCT INFORMATION



**LH 846**

Item No. 17686

**CAS Registry No.:** 639052-78-1

**Formal Name:** N-(5-chloro-6-methyl-2-benzothiazolyl)-benzeneacetamide

**MF:** C<sub>16</sub>H<sub>13</sub>ClN<sub>2</sub>OS

**FW:** 316.8

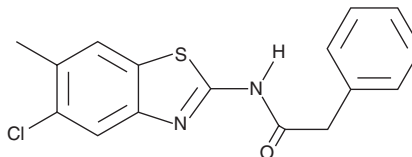
**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 212, 233, 274, 296, 307 nm

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:** As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



## Laboratory Procedures

LH 846 is supplied as a crystalline solid. A stock solution may be made by dissolving the LH 846 in the solvent of choice. LH 846 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of LH 846 in these solvents is approximately 5 mg/ml.

## Description

LH 846 is a benzothiazole analog that selectively inhibits casein kinase (CK) 1δ (IC<sub>50</sub> = 290 nM).<sup>1</sup> It inhibits CK1ε and CK1α at much higher concentrations (IC<sub>50</sub>s = 1.3 and 2.5 μM, respectively) but does not inhibit CK2.<sup>1</sup> LH 846 has been shown to inhibit CK1δ-dependent phosphorylation and degradation of PER1 protein and to lengthen the circadian period in U2OS cells.<sup>1</sup>

## Reference

1. Lee, J.W., Hirota, T., Peters, E.C., M., *et al.* A small molecule modulates circadian rhythms through phosphorylation of the period protein. *Angew Chem. Int. Ed. Engl.* **50(45)**, 10608-10611 (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.

### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/22/2016

## 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](http://WWW.CAYMANCHEM.COM)