# PRODUCT INFORMATION



**C82** 

Item No. 33563

CAS Registry No.: 691862-35-8

Formal Name: 6-ethyl-N-(2-methoxyphenyl)-4-oxo-

thieno[2,3-d]pyrimidine-3(4H)-acetamide

MF:  $C_{17}H_{17}N_3O_3S$ 

FW: 343.4 **Purity:** ≥98%

 $\lambda_{max}$ : 238, 290 nm A crystalline solid UV/Vis.: Supplied as:

Storage: -20°C Stability: ≥2 vears

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### **Laboratory Procedures**

C82 is supplied as a crystalline solid. A stock solution may be made by dissolving the C82 in the solvent of choice, which should be purged with an inert gas. C82 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of C82 in these solvents is approximately 30 mg/ml.

C82 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, C82 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. C82 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

C82 is an inhibitor of M. tuberculosis (Mtb) cyclic dinucleotide phosphodiesterase (CdnP;  $IC_{50}$  = 17.5  $\mu$ M), the enzyme that catalyzes the hydrolysis of cyclic di-AMP (c-di-AMP; Item No. 17753) to adenosine 5'-monophosphate (AMP; Item No. 21094). It is selective for Mtb CdnP over the additional bacterial CDN phosphodiesterases (PDEs) Yybt, RocR, and group B streptococcus (GBS) CdnP, the mammalian CDN PDE ENPP1, and the viral CDN PDE poxin at 200  $\mu$ M.

### Reference

1. Karanja, C.W., Yeboah, K.S., and Sintim, H.O. Identification of a Mycobacterium tuberculosis cyclic dinucleotide phosphodiesterase inhibitor. ACS Infect. Dis. 7(2), 309-317 (2021).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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