

# PRODUCT INFORMATION

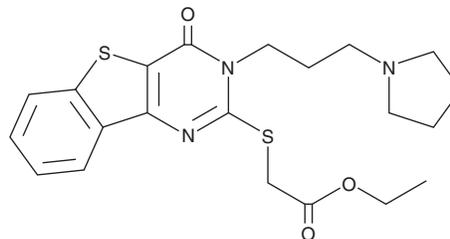


**CM037**

Item No. 21868

**CAS Registry No.:** 896795-60-1  
**Formal Name:** 2-[[3,4-dihydro-4-oxo-3-[3-(1-pyrrolidinyl)propyl][1]benzothieno[3,2-d]pyrimidin-2-yl]thio]-acetic acid, ethyl ester

**MF:** C<sub>21</sub>H<sub>25</sub>N<sub>3</sub>O<sub>3</sub>S<sub>2</sub>  
**FW:** 431.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 254, 334, 348 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

CM037 is supplied as a crystalline solid. A stock solution may be made by dissolving the CM037 in the solvent of choice. CM037 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of CM037 in these solvents is approximately 2.5 and 10 mg/ml, respectively.

CM037 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CM037 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CM037 has a solubility of approximately 0.125 mg/ml in a 1:7 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

CM037 is a selective inhibitor of aldehyde dehydrogenase 1A1 (ALDH1A1; IC<sub>50</sub> = 4.6 μM).<sup>1</sup> It is selective for ALDH1A1 over eight other ALDH isoenzymes at a concentration of 20 μM. CM037 is a competitive inhibitor against acetaldehyde with a K<sub>i</sub> value of 0.23 μM.

## Reference

1. Morgan, C.A. and Hurley, T.D. Characterization of two distinct structural classes of selective aldehyde dehydrogenase 1A1 inhibitors. *J. Med. Chem.* **58**(4), 1964-1975 (2015).

### 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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