

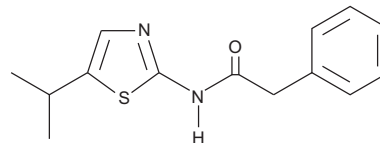
# PRODUCT INFORMATION



**CAY10554**

Item No. 10010301

**CAS Registry No.:** 267654-00-2  
**Formal Name:** N-[5-(1-methylethyl)2-thiazolyl]-benzeneacetamide  
**Synonym:** BML-259  
**MF:** C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>OS  
**FW:** 260.4  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 275 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

CAY10554 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10554 in the solvent of choice, which should be purged with an inert gas. CAY10554 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10554 in ethanol is approximately 0.25 mg/ml and approximately 30 mg/ml in DMSO and DMF.

CAY10554 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10554 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CAY10554 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

Cyclin-dependent kinases (CDKs) are key regulators of cell cycle progression and are therefore promising therapeutic targets for cancer and neurodegenerative diseases. CAY10554 is a potent inhibitor of Cdk5 and Cdk2, with IC<sub>50</sub> values of 64 and 98 nM, respectively.<sup>1</sup>

## Reference

1. Helal, C.J., Sanner, M.A., Cooper, C.B., *et al.* Discovery and SAR of 2-aminothiazole inhibitors of cyclin-dependent kinase 5/p25 as a potential treatment for Alzheimer's disease. *Bioorg. Med. Chem. Lett.* **14**(22), 5521-5525 (2004).

### 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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