

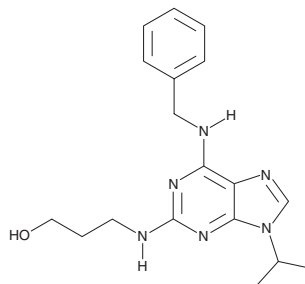
# PRODUCT INFORMATION



## Bohemine

Item No. 21073

**CAS Registry No.:** 189232-42-6  
**Formal Name:** 3-[[9-(1-methylethyl)-6-[(phenylmethyl)amino]-9H-purin-2-yl]amino]-1-propanol  
**MF:** C<sub>18</sub>H<sub>24</sub>N<sub>6</sub>O  
**FW:** 340.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 210, 231, 290 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

Bohemine is supplied as a crystalline solid. A stock solution may be made by dissolving the bohemine in the solvent of choice. Bohemine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of bohemine in ethanol is approximately 15 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Bohemine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, bohemine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Bohemine has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Bohemine is a purine derivative that inhibits cyclin-dependent kinases (Cdks) (IC<sub>50</sub>s = 4.6, 8.3, and 2.7 μM for Cdk2/cyclin E, Cdk2/cyclin A, and Cdk9/cyclin T1, respectively).<sup>1</sup> It has been shown to suppress cell growth and induce G<sub>1</sub> and G<sub>2</sub> phase cell cycle arrest in hybridoma cells.<sup>2</sup>

### References

1. Raynaud, F.I., Whittaker, S.R., Fischer, P.M., *et al.* *In vitro* and *in vivo* pharmacokinetic-pharmacodynamic relationships for the trisubstituted aminopurine cyclin-dependent kinase inhibitors olomoucine, bohemine and CYC202. *Clin. Cancer Res.* **11(13)**, 4875-4887 (2005).
2. Francěk, F., Strnad, M., Havlíček, L., *et al.* Diverse effects of the cyclin-dependent kinase inhibitor bohemine: Concentration- and time-dependent suppression or stimulation of hybridoma culture. *Cytotechnology* **36(1-3)**, 117-123 (2001).

#### 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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