

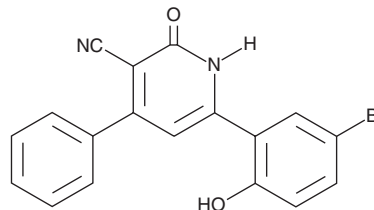
# PRODUCT INFORMATION



## TCS PIM-1 1

Item No. 16286

**CAS Registry No.:** 491871-58-0  
**Formal Name:** 6-(5-bromo-2-hydroxyphenyl)-1,2-dihydro-2-oxo-4-phenyl-3-pyridinecarbonitrile  
**Synonyms:** Pim-1 Kinase Inhibitor II, SC 204330  
**MF:** C<sub>18</sub>H<sub>11</sub>BrN<sub>2</sub>O<sub>2</sub>  
**FW:** 367.2  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 370 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

TCS PIM-1 1 is supplied as a crystalline solid. A stock solution may be made by dissolving the TCS PIM-1 1 in the solvent of choice, which should be purged with an inert gas. TCS PIM-1 1 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of TCS PIM-1 1 in these solvents is approximately 30 and 20 mg/ml, respectively.

TCS PIM-1 1 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, TCS PIM-1 1 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. TCS PIM-1 1 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

The proto-oncogene serine/threonine-protein kinases, Pim-1 and Pim-2, are enzymes involved in cytokine signaling and participate in various signal transduction pathways, including cell growth, differentiation, and apoptosis. Their overexpression has been implicated in prostate cancer, some forms of leukemia, and lymphoma. TCS PIM-1 1 is an ATP-competitive Pim-1 kinase inhibitor (IC<sub>50</sub> = 50 nM) that displays selectivity over the related kinases, Pim-2 and MEK1/2 (IC<sub>50</sub>s = >20 μM).<sup>1</sup>

### Reference

1. Cheney, I.W., Yan, S., Appleby, T., *et al.* Identification and structure-activity relationships of substituted pyridones as inhibitors of Pim-1 kinase. *Bioorg. Med. Chem. Lett.* **17(6)**, 1679-1683 (2007).

#### 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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