

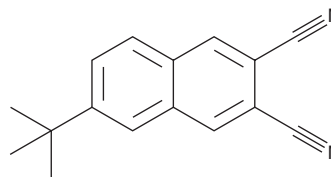
# PRODUCT INFORMATION



**BRD9876**

Item No. 33217

**CAS Registry No.:** 32703-82-5  
**Formal Name:** 6-(1,1-dimethylethyl)-2,3-naphthalenedicarbonitrile  
**MF:** C<sub>16</sub>H<sub>14</sub>N<sub>2</sub>  
**FW:** 234.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 252 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

BRD9876 is supplied as a crystalline solid. A stock solution may be made by dissolving the BRD9876 in the solvent of choice, which should be purged with an inert gas. BRD9876 is soluble in organic solvents such as dimethyl formamide (DMF) and chloroform. The solubility of BRD9876 in these solvents is approximately 1 and 10 mg/ml, respectively.

BRD9876 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BRD9876 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. BRD9876 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

BRD9876 is an inhibitor of the kinesin spindle protein Eg5.<sup>1</sup> It arrests Eg5-mediated microtubule gliding, as well as inhibits Eg5 ATPase activity in the presence of microtubules, in cell-free assays. BRD9876 is cytotoxic to MM.1S stroma-independent multiple myeloma cells (IC<sub>50</sub> = 2.2 μM). It induces cell cycle arrest at the G<sub>2</sub>/M phase in MM.1S cells when used at a concentration of 10 μM.

## Reference

1. Chattopadhyay, S., Stewart, A.L., Mukherjee, S., *et al.* Niche-based screening in multiple myeloma identifies a kinesin-5 inhibitor with improved selectivity over hematopoietic progenitors. *Cell Rep.* **10(5)**, 755-770 (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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