

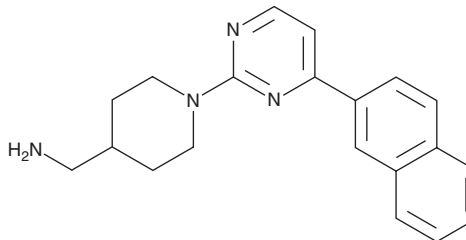
# PRODUCT INFORMATION



## WAY-262611

Item No. 17704

**CAS Registry No.:** 1123231-07-1  
**Formal Name:** 1-[4-(2-naphthalenyl)-2-pyrimidinyl]-4-piperidinemethanamine  
**Synonyms:** BML-WN110, Dickkopf-1 Inhibitor, Dkk1 Inhibitor  
**MF:** C<sub>20</sub>H<sub>22</sub>N<sub>4</sub>  
**FW:** 318.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 226, 256, 338 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

WAY-262611 is supplied as a crystalline solid. A stock solution may be made by dissolving the WAY-262611 in the solvent of choice, which should be purged with an inert gas. WAY-262611 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of WAY-262611 in ethanol is approximately 50 mg/ml and approximately 30 mg/ml in DMSO and DMF.

WAY-262611 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, WAY-262611 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. WAY-262611 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Wnt signaling proteins are small secreted proteins that are active in embryonic development, tissue homeostasis, and tumorigenesis.<sup>1-3</sup> Dickkopf-1 (Dkk1) antagonizes Wnt signaling and has important roles in bone formation, cancer, and Alzheimer's disease.<sup>4</sup> WAY-262611 is an inhibitor of Dkk1 that activates the Wnt signaling pathway, stimulating β-catenin/TCF-dependent transcription with an EC<sub>50</sub> value of 0.63 μM.<sup>5</sup> It has good pharmacokinetic properties and increases trabecular bone formation in ovariectomized rats following oral administration.<sup>5</sup> WAY-262611 has been used to elucidate the role of Dkk1 in modulating Wnt signaling, particularly in the context of arthritis.<sup>6,7</sup>

### References

1. Polakis, P. *Genes Dev.* **14(15)**, 1837-1851 (2000).
2. Reya, T. and Clevers, H. *Nature* **434(7035)**, 834-850 (2005).
3. Clevers, H. *Cell* **127(3)**, 469-480 (2006).
4. Hameed, A., Brady, J.J., Dowling, P., et al. *Cancer Growth Metastasis* **7**, 33-42 (2014).
5. Pelletier, J.C., Lundquist, J.T., Gilbert, A.M., et al. *J. Med. Chem.* **52(22)**, 6962-6965 (2009).
6. Enochson, L., Stenberg, J., Brittberg, M., et al. *Osteoarthritis Cartilage* **22(4)**, 566-577 (2014).
7. Choe, Y., Hun Kim, J., Park, K.Y., et al. *Rheumatology (Oxford)* **55(5)**, 928-938 (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.

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