

# PRODUCT INFORMATION



## SB-FI-26

Item No. 14191

**Formal Name:** (1R,2R,3R,4R)-3-((naphthalen-1-yloxy)carbonyl)-2,4-diphenylcyclobutane-1-carboxylic acid

**MF:** C<sub>28</sub>H<sub>22</sub>O<sub>4</sub>

**FW:** 422.5

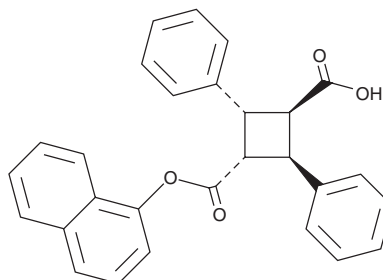
**Purity:** ≥95%

**UV/Vis.:** λ<sub>max</sub>: 221, 280 nm

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

SB-FI-26 is supplied as a crystalline solid. A stock solution may be made by dissolving the SB-FI-26 in the solvent of choice. SB-FI-26 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of SB-FI-26 in these solvents is approximately 20 and 12.5 mg/ml, respectively.

SB-FI-26 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SB-FI-26 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. SB-FI-26 has a solubility of approximately 0.5 mg/ml in a 1:1 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 fatty acid binding proteins (FABPs) 5 and 7 have been identified as intracellular transporters for the endocannabinoid anandamide.<sup>1</sup> They are thought to be required for transport of anandamide through the cytoplasm to the endoplasmic reticulum for degradation by fatty acid amide hydrolase. SB-FI-26 is an  $\alpha$ -truxillic acid 1-naphthyl mono-ester derived from incarvilleine (*I. sinensis*) that inhibits FABP5 binding to NBD-stearate in an *in vitro* displacement assay with a K<sub>i</sub> value of 0.9  $\mu$ M.<sup>2</sup> At 20 mg/kg, i.p., SB-FI-26 has been reported to have antinociceptive and anti-inflammatory effects in several mouse models of pain.<sup>2</sup>

### References

1. Kaczocha, M., Glaser, S.T., and Deutsch, D.G. Identification of intracellular carriers for the endocannabinoid anandamide. *Proc. Natl. Acad. Sci. USA* **106**(15), 6375-6380 (2009).
2. Berger, W.T., Ralph, B.P., Kaczocha, M., et al. Targeting fatty acid binding protein (FABP) anandamide transporters - a novel strategy for development of anti-inflammatory and anti-nociceptive drugs. *PLoS One* **7**(12), (2012).

#### 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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