

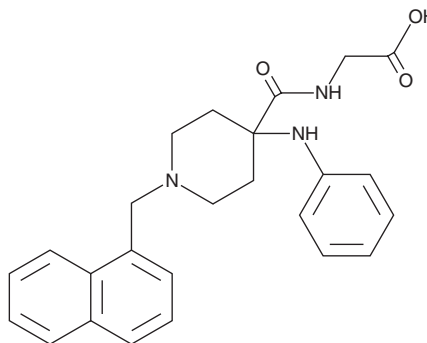
# PRODUCT INFORMATION



## VBIT-12

Item No. 31445

**CAS Registry No.:** 2089227-65-4  
**Formal Name:** N-[[1-(1-naphthalenylmethyl)-4-(phenylamino)-4-piperidiny] carbonyl]-glycine  
**MF:** C<sub>25</sub>H<sub>27</sub>N<sub>3</sub>O<sub>3</sub>  
**FW:** 417.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 224 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

VBIT-12 is supplied as a crystalline solid. A stock solution may be made by dissolving the VBIT-12 in the solvent of choice, which should be purged with an inert gas. VBIT-12 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of VBIT-12 in ethanol is approximately 15 mg/ml and approximately 30 mg/ml in DMSO and DMF.

VBIT-12 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, VBIT-12 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. VBIT-12 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

VBIT-12 is a voltage-dependent anion channel 1 (VDAC1) inhibitor.<sup>1</sup> It inhibits VDAC1 conductance in synthetic lipid membranes containing purified rat VDAC1 when used at concentrations ranging from 20 to 100 μM.

### Reference

1. Shoshan-Barmatz, V., Nahon-Crystal, E., Shteinifer-Kuzmine, A., *et al.* VDAC1, mitochondrial dysfunction, and Alzheimer's disease. *Pharmacol. Res.* **131**, 87-101 (2018).

#### 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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