

# PRODUCT INFORMATION



## E6 Berbamine

Item No. 19358

**Formal Name:** 3,4,4a,5,16aR,17,18,19-octahydro-21,22,26-trimethoxy-4,17-dimethyl-16H-1,24:6,9-dietheno-11,15-metheno-2H-pyrido[2,3':17,18][1,11]dioxacycloicosino[2,3,4-ij]isoquinolin-12-ol-4-nitrobenzoate

**Synonyms:** Berbamine *p*-nitrobenzoate, O-(4-Nitrobenzoyl)berbamine

**MF:** C<sub>44</sub>H<sub>43</sub>N<sub>3</sub>O<sub>9</sub>

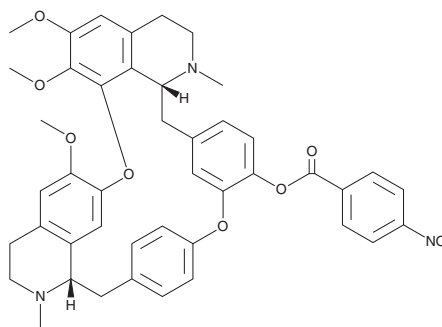
**FW:** 757.8

**Purity:** ≥98%

**Supplied as:** A 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

E6 Berbamine is supplied as a solid. A stock solution may be made by dissolving the E6 berbamine in the solvent of choice. E6 Berbamine is soluble in organic solvents ethanol and DMSO, which should be purged with an inert gas. The solubility of E6 berbamine in these solvents is approximately 25 mM.

### Description

E6 Berbamine is a calmodulin inhibitor that disrupts the activity of calmodulin-dependent enzymes such as myosin light chain kinase (IC<sub>50</sub> = 8 μM) and phosphodiesterase 1A (IC<sub>50</sub> = 0.53 μM).<sup>1</sup> It is also reported to inhibit P-glycoprotein activity in purified primary cultured rat brain microvessel endothelial cells at 10 μM.<sup>2</sup>

### References

1. Hu, Z.-Y., Gong, Y.-S., and Huang, W.-L. Interaction of berbamine compound E6 and calmodulin-dependent myosin light chain kinase. *Biochem. Pharmacol.* **44**(8), 1543-1547 (1992).
2. Zhu, H.-J. and Liu, G.-Q. Effect of E6, a novel calmodulin inhibitor, on activity of P-glycoprotein in purified primary cultured rat brain microvessel endothelial cells. *Acta Pharmacol. Sin.* **24**(11), 1143-1149 (2003).

#### 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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