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## DATASHEET

E6 Berbamine

### Product overview

<b>Name</b>	E6 Berbamine
<b>Cat No</b>	HB0269
<b>Alternative names</b>	E6; Berbamine compound E6
<b>Biological action</b>	Antagonist
<b>Description</b>	Potent, selective CaM antagonist

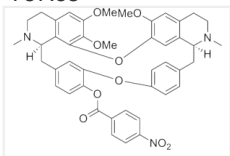
### Biological Data

<b>Biological description</b>	Potent and selective calmodulin (CaM) antagonist. Inhibits MLCK activity ( $K_i = 0.95 \mu\text{M}$ ) and P-glycoprotein (P-gp) activity in vascular endothelial cells. Inhibits $\alpha 3$ -containing neuronal nicotinic acetylcholine receptors ( $\alpha 3$ -nAChRs). Cell-permeable.
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### Solubility & Handling

<b>Storage instructions</b>	-20 °C
<b>Solubility overview</b>	Soluble in DMSO (25mg/ml) or ethanol (25mg/ml)
<b>Important</b>	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

### Chemical Data

<b>Chemical name</b>	6,6',7'-Trimethoxy-2,2'-dimethylberbaman-12-yl acetate; Calmodulin inhibitor
<b>Molecular Weight</b>	757.83
<b>Chemical structure</b>	
<b>Molecular Formula</b>	$\text{C}_{44}\text{H}_{43}\text{N}_3\text{O}_9$
<b>CAS Number</b>	73885-53-7
<b>PubChem identifier</b>	0
<b>SMILES</b>	<chem>COc1cc2CCN(C)C3Cc4ccc(Oc5cc(CC6N(C)CCc7cc(OC)c(OC)c(Oc1cc23)c67)ccc5OC(C)=O)cc4</chem>

### References

#### Interaction of berbamine compound E6 and calmodulin-dependent myosin light chain kinase.

Hu ZY *et al* (1992) *Biochem Pharmacol* 44(8)

**PubMedID** [1417979](#)

#### Effect of E6, a novel calmodulin inhibitor, on activity of P-glycoprotein in purified primary cultured rat brain microvessel endothelial cells.

Zhu HJ *et al* (2003) *Acta Pharmacol Sin* 24(11)

PubMedID

14627500

**Differential inhibition of rat  $\alpha 3^*$  and  $\alpha 7$  nicotinic acetylcholine receptors by tetrandrine and closely related bis-benzylisoquinoline derivatives.**

Virginio C *et al* (2005) *Neurosci Lett* 381(3)

PubMedID

15896488

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