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DATASHEET

E6 Berbamine

Product overview

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

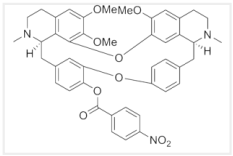
Biological Data

Biological description	Potent and selective calmodulin (CaM) antagonist. Inhibits MLCK activity (K_i = 0.95 µM) and P-glycoprotein (P-gp) activity in vascular endothelial cells. Inhibits α3-containing neuronal nicotinic acetylcholine receptors (α3-nAChRs). Cell-permeable.

Solubility & Handling

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

Chemical Data

Chemical name	6,6',7-Trimethoxy-2,2'-dimethylberbaman-12-yl acetate; Calmodulin inhibitor
Molecular Weight	757.83
Chemical structure	
Molecular Formula	$C_{44}H_{43}N_3O_9$
CAS Number	73885-53-7
PubChem identifier	0
SMILES	COc1cc2CCN(C)C3Cc4ccc(Oc5cc(CC6N(C)CCc7cc(OC)c(OC)c(Oc1cc23)c67)ccc5OC(C)=O)cc4

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 alpha3* and alpha7 nicotinic acetylcholine receptors by tetrandrine and closely related bis-benzylisoquinoline derivatives.

Virginio C *et al* (2005) Neurosci Lett 381(3)
PubMedID 15896488