Penitrem A, High conductance Ca activated K⁺ channel inhibitor

Catalog	Unit
TBI2099 - 1MG	1 mg
TBI2099 - 5MG	5 mg

Product Details

Alternate Names: Tremortin A; NSC354845

Molecular Formula: C₃₇H₄₄ClNO₆

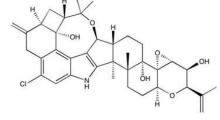
Formula Weight: 634.21 **CAS Number:** 12627-35-9

Purity: >98%

Formulation: Powder

Solubility: Soluble in DMSO (up to 6 mg/ml)

Storage: -20° C Stability: ≥ 2 years.



Applications

High conductance Ca activated K⁺ channel inhibitor

Functions

Penitrem A (12627-35-9) is a fungal mycotoxin that acts as a selective, irreversible blocker of the smooth muscle high conductance Ca2+-activated K+ (BK, KCa1.1) channel (100% block at 10 nM).1 Displays brain neurotoxicity in rats along with dose-dependent convulsions and death.2 An important tool for studying the role of BK channels in vascular function which is effective in cellular, tissue and in vivo experiments.3 Inhibits BK channels in inside-out and cell-attached patches, whereas iberiotoxin (considered the gold standard BK channel blocker) does not.3 May be used to partially ablate Purkinje cells in immature rat cerebellum providing a model for neural stem cell transplantation studies.

Application Procedures

First dissolved in DMSO (up to 6 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

Relative Products

TBI1170	Mitomycin C
TBI1345	E64, Cysteine protease inhibitor
TBI1347	E64d, Cysteine protease inhibitor
TBI2064	Chromomycin A3
TBI2069	Cytochalasin B
TBI2794	5-EDU, DNA Click labeling probe
TBI2071	Cytochalasin D
TBI1286	Bestatin, Aminopeptidase inhibitor
TBI2140	Gemcitabline
TBI2058	Aphidicolin, DNA polymerase Inhibito

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