

Stiripentol, Anticonvulsant/LDHA inhibitor

Catalog	Unit
TBI3978-10MG	10 mg
TBI3978-50MG	50 mg

Product Details

Formal Name: (E)-1-(1,3-Benzodioxol-5-yl)-4,4-dimethylpent-1-en-3-ol

Alternate Names: BCX2600

Molecular Formula: C₁₄H₁₈O₃

Formula Weight: 234.3

CAS Number: 49763-96-4

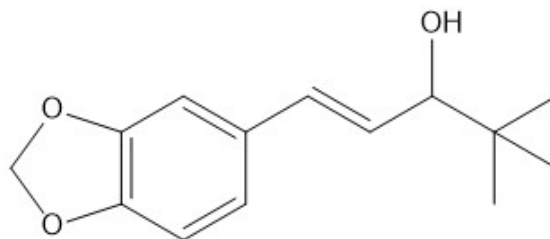
Purity: >98%

Formulation: Powder

Solubility: Soluble in DMSO (> 50 mg/ml)

Storage: -20°C

Stability: ≥ 2 years



Applications

Anticonvulsant/LDHA inhibitor

Functions

Clinically useful anticonvulsant used to treat Dravet syndrome. The precise mechanism of action is unknown but it is thought to act via increasing GABAergic activity, inhibiting LDHA and thereby activating ATP-sensitive potassium channels, and blocking Na⁺ and Ca²⁺ channels. It also inhibits the cytochrome P450 enzymes 1A2, 2C9, 2C19, 2D6, and 3A4. Stiripentol and the copper ionophore elesclomol (Cat#10-4238) synergistically suppressed esophageal squamous cell carcinoma (ESCC) tumor growth. Lactate dehydrogenase A inhibition by stiripentol reduced ESCC cuproptosis resistance by inhibiting lactylation of NUDT21.

Application Procedures

First dissolved in DMSO (> 50 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.