[ Product Information ]

Name: Dimethyl lithospermate B
Catalog No.: CFN90690
Cas No.: 875313-64-7
Purity: >=90%
M.F: C₃₈H₃₄O₁₆
M.W: 746.67
Physical Description: Powder
Synonyms: Lithospermic acid B dimethyl ester.

[ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Synthetic precursor compounds;
4. Intermediates & Fine Chemicals;
5. Others.

[ Source ]

The roots of Salvia miltiorrhiza Bge.

[ Biological Activity or Inhibitors ]

Dimethyl lithospermate B (dmLSB) is an extract of Danshen, which slows inactivation of
INa, leading to increased inward current during the early phases of the action potential (AP); dmLSB is effective in eliminating the arrhythmogenic substrate responsible for the Brugada syndrome and that it deserves further study as a pharmacological adjunct to implanted cardioverter/defibrillator usage.[1]

Since the Action potential duration (APD) prolongation by dimethyl lithospermate B did not provoke early after-depolarization (EAD), which is thought as a possible mechanism for the proarrhythmia seen in other Na(+) channel agonists, dmLSB might be an excellent candidate for a Na(+) channel agonist.[2]

Dimethyl lithospermate has anti-oxidant activity, it can significantly inhibit nitration of bovine serum albumin by peroxynitrite (ONOO(-)) in a dose-dependent manner, also can manifest cytprotection from cell damage induced by ONOO(-); suggests that D dimethyl lithospermate is an effective ONOO(-) scavenger and promotes cellular defense activity in the protection against ONOO(-)-involved diseases. [3]

[ Solvent ]
Pyridine, Methanol, Ethanol, etc.

[ HPLC Method ][4]
Mobile phase: Methanol-Acetonitrile-Formic acid-H2O=30:10:1:59 ;
Flow rate: 1.0 ml/min;
Column temperature: Room Temperature;
The wave length of determination: 286 nm.

[ Storage ]
2-8°C, Protected from air and light, refrigerate or freeze.

[ References ]
