

Demethyleneberberine Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Demethyleneberberine

Catalog No.: CFN90696

Cas No.: 25459-91-0

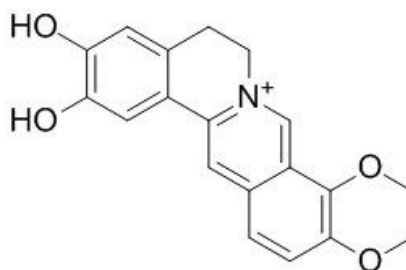
Purity: >=98%

M.F: C₁₉H₁₈NO₄

M.W: 324.35

Physical Description: Yellow powder

Synonyms: Dibenzo[a,g]quinoliziniumM,5,6-dihydro-2,3-dihydroxy-9,10-diMethoxy.



[Intended Use]

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

[Source]

The roots of *Coptis chinensis* Franch.

[Biological Activity or Inhibitors]

Demethyleneberberine (DMB), a natural mitochondria-targeted antioxidant, it suppresses

CYP2E1, hypoxia inducible factor α , and inducible nitric oxide synthase, which contributes to oxidative stress and restores sirtuin 1/AMP-activated protein kinase/peroxisome proliferator-activated receptor- γ coactivator-1 α pathway-associated fatty acid oxidation in chronic ethanol-fed mice, which in turn ameliorates lipid peroxidation and macrosteatosis in the liver; taking these findings together, DMB could serve as a novel and potential therapy for alcoholic liver disease (ALD) in human beings.^[1]

Demethyleneberberine can attenuate non-alcoholic fatty liver disease with activation of AMPK and inhibition of oxidative stress.^[2]

[Solvent]

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

[HPLC Method]^[3]

Mobile phase: Methanol -H₂O, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 340 nm.

[Storage]

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

[References]

[1] Zhang P, Qiang X, Zhang M, *et al. J. Pharmacol. Exp. Ther.*, 2015, 352(1):139-47.

[2] Qiang X, Xu L, Zhang M, *et al. Biochem. Bioph. Res. Co.*, 2016, 472(4):603-9.

[3] Qiu F, Zhu Z, Kang N, *et al. Drug Metab. Dispos.*, 2008, 36(11):131-55.

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