

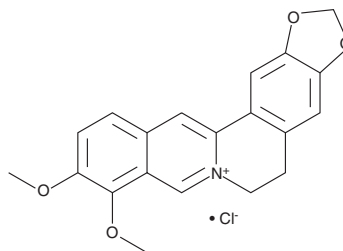
Product Information



Berberine

Catalog No. 10006427

CAS Registry No.: 633-65-8
Formal Name: 5,6-dihydro-9,10-dimethoxy-benzo[g]-1,3-benzodioxolo[5,6-a]quinolizinium, chloride
Synonyms: BBR, Umbellatine
MF: C₂₀H₁₈ClNO₄
FW: 371.8
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that berberine be stored as supplied at -20°C. It should be stable for at least two years.

Berberine is supplied as a crystalline solid. Berberine is sparingly soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. For biological experiments, we suggest that organic solvent-free aqueous solutions of berberine be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of berberine in water, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Berberine is a widely distributed berberidacean alkaloid that has been employed in traditional medicine as an antiprotozoal and antidiarrheal agent. Berberine reduces total cholesterol, low-density lipoprotein (LDL) cholesterol, and triglycerides in both humans (at 1 g/day) and hamsters fed 50 mg/kg/day along with a high fat diet.¹ Berberine does not act through 3-hydroxy-3-methylglutaryl coenzyme A (HMG-CoA) reductase inhibition, but instead enhances LDL-receptor protein and mRNA levels in hepatocytes. Berberine is therefore a natural product that may help control serum cholesterol without the side effects typical of the statin family of hypocholesterolemic drugs.

Reference

1. Kong, W., Wei, J., Abidi, P., *et al.* Berberine is a novel cholesterol-lowering drug working through a unique mechanism distinct from statins. *Nature Med.* **10(12)**, 1344-1351 (2004).

Related Products

NO-Fluvastatin - Cat. No. 10006043 • NO-Pravastatin - Cat. No. 10006044 • Hesperetin - Cat. No. 10006084 • Oleic Acid-2,6-diisopropyl Anilide - Cat. No. 10006782

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WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

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For further details, please refer to our **Warranty and Limitation of Remedy located on our website and in our catalog**.

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