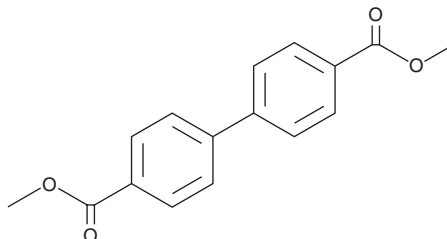


# PRODUCT INFORMATION

## Dimethyl biphenyl-4,4'-dicarboxylate

Item No. 17869

**CAS Registry No.:** 792-74-5  
**Formal Name:** 4,4'-dimethyl ester [1,1'-biphenyl]-4,4'-dicarboxylic acid  
**Synonym:** Biphenyl dimethyl dicarboxylate  
**MF:** C<sub>16</sub>H<sub>14</sub>O<sub>4</sub>  
**FW:** 270.3  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 280 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Dimethyl biphenyl-4,4'-dicarboxylate is supplied as a crystalline solid. A stock solution may be made by dissolving the dimethyl biphenyl-4,4'-dicarboxylate in the solvent of choice. Dimethyl biphenyl-4,4'-dicarboxylate is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of dimethyl biphenyl-4,4'-dicarboxylate in these solvents is approximately 0.25 and 1 mg/ml, respectively.

Dimethyl biphenyl-4,4'-dicarboxylate is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

Dimethyl biphenyl-4,4'-dicarboxylate is a planar biphenyldicarboxylic acid ester used as a hepatoprotectant in the treatment of chronic hepatitis.<sup>1</sup> At 250 µg/ml, it has been shown to stimulate JAK/STAT signaling and to induce the expression of interferon-α stimulated genes in a HepG2 cell line.<sup>1</sup>

### Reference

1. Joo, S.S., Won, T.J., Kim, M.J., et al. Interferon signal transduction of biphenyl dimethyl dicarboxylate/amantadine and anti-HBV activity in HepG2 2.2.15. *Arch. Pharm. Res.* **29(5)**, 405-411 (2006).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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