# PRODUCT INFORMATION



## (6R,S)-5,10-Methenyl-5,6,7,8-tetrahydrofolic Acid

Item No. 31333

**CAS Registry No.:** 7444-29-3

Formal Name: (6aR)-3-amino-8-[4-[[[(1S)-1,3-dicarboxypropyl]

amino|carbonyl|phenyl|-1,2,5,6,6a,7-hexahydro-1-

oxo-imidazo[1,5-f]pteridinium, inner salt

Synonyms: Anhydroleucovorin, 6R-N<sup>5</sup>-N<sup>10</sup>-methylene-5,6,7,8-

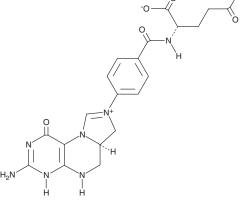
tetrahydrofolate

MF:  $C_{20}H_{21}N_7O_6$ FW: 455.4 ≥95% **Purity:** 

UV/Vis.:  $\lambda_{max}$ : 370 nm A crystalline solid Supplied as:

-20°C Storage: ≥4 years Stability:

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



### **Laboratory Procedures**

(6R,S)-5,10-Methenyl-5,6,7,8-tetrahydrofolic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the (6R,S)-5,10-methenyl-5,6,7,8-tetrahydrofolic acid in the solvent of choice, which should be purged with an inert gas. (6R,S)-5,10-Methenyl-5,6,7,8-tetrahydrofolic acid is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml.

(6R,S)-5,10-Methenyl-5,6,7,8-tetrahydrofolic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (6R,S)-5,10-methenyl-5,6,7,8-tetrahydrofolic acid should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. (6R,S)-5,10-Methenyl-5,6,7,8-tetrahydrofolic acid has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

(6R,S)-5,10-Methenyl-5,6,7,8-tetrahydrofolic acid is an intermediate in the biosynthesis of thymidylate.<sup>1</sup>

#### Reference

1. Karunaratne, K., Luedtke, N., Quinn, D.M., et al. Flavin-dependent thymidylate synthase: N5 of flavin as a Methylene carrier. Arch. Biochem. Biophys. 632, 11-19 (2017).

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

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.

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#### **CAYMAN CHEMICAL**

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM