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Product Information

Methotrexate hydrate

Product Number **M 8407**
Storage Temperature -0 °C

Product Description

Synonym: (+)-Amethopterin hydrate
Molecular Formula: $C_{20}H_{22}N_8O_5$
Molecular Weight: 454.4
CAS Number: 59-05-2

Amethopterin and aminopterin, both folic acid derivatives, are often confused. Methotrexate can be used in selection medium for hybridomas (HMT) much like the aminopterin in HAT medium. Amethopterin belongs to the aminopterin family and like aminopterin is a powerful inhibitor of dihydrofolate reductase, an enzyme involved in cellular DNA synthesis.

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

It is soluble in 1M NaOH or NH_4OH (10 mg/ml).

For tissue culture purposes, sodium carbonate buffer (pH 9.0-9.5) can be used to dissolve methotrexate. *Drosophila* Manual, p. 352, Cold Spring Harbor Lab Press (1989), recommends making a 5 mM stock solution by adding 2.5 mg methotrexate per ml in 250 mM sodium carbonate pH, 9.5.

Storage/Stability

The diluted stock is stable at 4-8 °C for approximately 30 days.

JSX/SAG 9/02

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