Emetine dihydrochloride hydrate

Product Number  E 2375
Storage Temperature  2-8 °C

Product Description
Molecular Formula: C_{29}H_{40}N_{2}O_{4} \cdot 2HCl
Molecular Weight: 553.6
CAS Number: 316-42-7
Rotation: +11° (1 mg/ml, H_{2}O, 25 °C)

Emetine inhibits protein synthesis in eukaryotic cells by binding to the 40S ribosomal subunit and inhibiting translocation.\(^1,2\) The use and effect on protein synthesis has been extensively reported.\(^3,4,5,6\) When emetine is added to a suspension of HeLa cells or reticulocytes, polyribosomes increase and single ribosomes decrease. Protein synthesis is inhibited irreversibly, possibly by affecting an aspect of translocation that involves movement of mRNA along the ribosome.\(^7\)

Emetine is a major member of the family of ipecac alkaloids.\(^8\) The biological properties and toxic effects have also been reviewed.\(^9\)

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

Preparation Instructions
Emetine is soluble in water (100 mg/ml).

Storage/Stability
Solutions are stable after autoclaving.\(^10\)

References

GRS/RXR  7/03

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