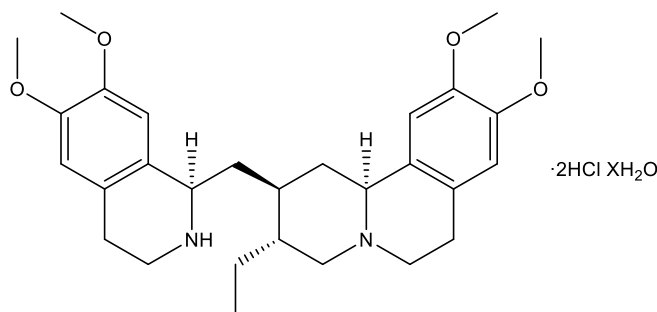


**Catalog # 10-3001**  
**Emetine hydrochloride**

CAS# 316-42-7

(2S,3R,11bS)-3-ethyl-1,3,4,6,7,11b-hexahydro-9,10-dimethoxy-2-[[[(1R)-1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinoliny]methyl]-2H-benzo[a]quinolizine dihydrochloride hydrate

Lot # X101491



Emetine (483-18-1) is one of the active ingredients of ipecac root extract, used as an emetic.<sup>1</sup> Induces apoptosis in breast cancer cells via inhibition of Wnt/ $\beta$ -catenin signaling.<sup>2</sup> Inhibits Zika and Ebola virus *in vitro* and *in vivo*, targeting viral entry and replication by inhibiting viral RNA polymerase and host lysosomal function.<sup>3</sup> Also inhibits SARS-CoV-2 replication in cells ( $EC_{50}$  for viral load reduction is 0.46  $\mu$ M).<sup>4</sup> A useful agent for inhibiting protein synthesis in eukaryotic cells by virtue of its inhibition of the ribosome 40S subunit.<sup>5</sup>

- 1) Lee *et al.* (2008), *Ipecacuanha: the South American vomiting root*; J R Coll. Physicians Edinb., **38** 355
- 2) Sun *et al.* (2019), *Emetine Exhibits Anticancer Activity in Breast Cancer Cells as an Antagonist of Wnt/ $\beta$ -catenin Signaling*; Oncol. Rep., **42** 1735
- 3) Yang *et al.* (2018), *Changing cancer survival in China during 2003-2015: a pooled analysis of 17 population-based cancer registries*; Cell Discov., **4** 31
- 4) Choy *et al.* (2020), *Remdesivir, Lopinavir, and Homoharringtonine Inhibit SARS-CoV-2 Replication in Vitro*; Antivir. Res., **178** 104786
- 5) Cuyas *et al.* (2015), *Anti-protozoal and Anti-Bacterial Antibiotics That Inhibit Protein Synthesis Kill Cancer Subtypes Enriched for Stem Cell-Like Properties*; Cell Cycle, **14** 3527

**PHYSICAL DATA**

|                        |  |
|------------------------|--|
| Molecular Weight:      | 553.56   |
| Molecular Formula:     | C <sub>29</sub> H <sub>40</sub> N <sub>2</sub> O <sub>4</sub> · 2HCl (XH <sub>2</sub> O)   |
| Purity:                | 98% by TLC   |
|                        | NMR: (Conforms)  |
| Solubility:            | Water (up to 100 mg/ml)  |
| Physical Description:  | White solid  |
| Storage and Stability: | Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in distilled water may be stored at -20°C for up to 3 months. |

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**