

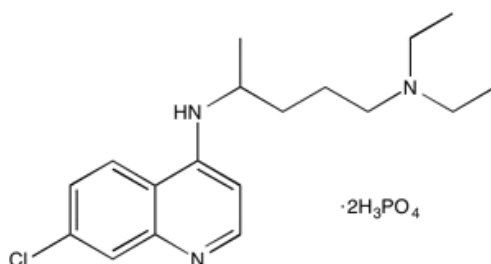
**Catalog # 10-2473**

**Chloroquine phosphate**

CAS# 50-63-5

*N*<sup>4</sup>-(7-Chloro-4-quinolinyl)-*N*<sup>1</sup>,*N*<sup>1</sup>-dimethyl-1,4-pentanediamine, diphosphate

Lot # X101521



Antimalarial drug. Inhibits autophagy in a variety of cell lines.<sup>1</sup> Induces cell death in breast cancer cell lines and displays antitumor and antimetastatic activity in mouse models of breast cancer.<sup>2</sup> Eliminates cancer stem cells via deregulation of JAK2 and DNMT1.<sup>3</sup> Displays synergy when combined with the Raf inhibitor, vemurafenib, in brain tumors.<sup>4</sup> Cell permeable and active *in vivo*.

- 1) Frieboes *et al.* (2014), *Chloroquine-mediated cell death in metastatic pancreatic adenocarcinoma through inhibition of autophagy*; JOP, **15** 189
- 2) Jiang *et al.* (2010), *Antitumor and antimetastatic activities of chloroquine diphosphate in a murine model of breast cancer*; Biomed. Pharmacother., **64** 609
- 3) Choi *et al.* (2014), *Chloroquine eliminates cancer stem cells through deregulation of Jak2 and DNMT1*; Stem Cells, **32** 2309.
- 4) Mulcahy Levy *et al.* (2014), *Autophagy inhibition improves chemosensitivity in BRAFV600E brain tumors*; Cancer Discov., **4** 773

**PHYSICAL DATA**

Molecular Weight:	515.87
Molecular Formula:	C <sub>18</sub> H <sub>26</sub> ClN <sub>3</sub> · 2H <sub>3</sub> PO <sub>4</sub>
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	Water (up to 25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at room temperature 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.**