

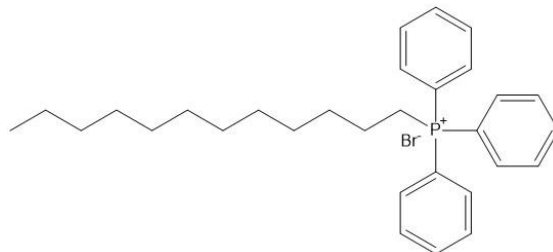
**Catalog # 10-3781**

**Dodecyl-TPP**

CAS# 15510-55-1

Dodecyltriphenylphosphonium bromide

Lot # X109662



A mitochondria-targeting agent which inhibits mitochondrial function inhibiting oxidative phosphorylation and shifting cell metabolism to glycolysis.<sup>1</sup> Potently eradicates cancer stem cells (50 nm to 1  $\mu$ M) selectively over normal cells<sup>1</sup>. Synergizes with FDA-approved drugs such as doxycycline and niclosamide as well as natural compounds such as berberine. Selectively inhibits the growth of Gram-positive over Gram-negative bacteria.<sup>2</sup>

- 1) De Francesco *et al.* (2019), *Dodecyl-TPP Targets Mitochondria and Potently Eradicates Cancer Stem Cells (CSCs): Synergy With FDA-Approved Drugs and Natural Compounds (Vitamin C and Berberine)*; *Front. Oncol.*, **9** 615
- 2) Khailova *et al.* (2015), *Uncoupling and Toxic Action of Alkyltriphenylphosphonium Cations on Mitochondria and the Bacterium Bacillus subtilis as a Function of Alkyl Chain Length*; *Biochemistry (Mosc.)*, **80** 1589

**PHYSICAL DATA**

Molecular Weight:	511.52
Molecular Formula:	C <sub>30</sub> H <sub>40</sub> BrP
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 50 mg/ml) or Ethanol (up to 25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

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