



Catalog # 10-1507

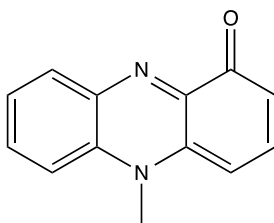
Pyocyanine

CAS# 85-66-5

Pyocyanin, Sanasin, Sanazin

5-Methyl-1(5H)-phenazinone

Lot # X106715



Pyocyanine, a redox-active phenazine produced by *P. aeruginosa* and other pathogens, is an electron receptor, which stimulates redox cycling in bacteria as well as in a variety of human cell lines. It enhances oxidative metabolism, which increases the formation of intracellular reactive oxygen species (ROS) via reduction of NADPH. Pyocyanine accelerates neutrophil apoptosis *in vitro*. Pyocyanine production by *P. aeruginosa* suppresses the acute inflammatory response by pathogen-driven acceleration of neutrophil apoptosis and associated reduction of local inflammation.

- 1) Rada and Leto (2013), *Pyocyanin effects on respiratory epithelium: relevance in Pseudomonas Aeruginosa airway infections*; Trends Microbiol., **21** 73
- 2) Reszka *et al.* (2012), *Inactivation of the potent Pseudomonas aeruginosa cytotoxin pyocyanin by airway peroxidases and nitrite*; Am.J.Physiol.Lung Cell Mol.Physiol., **302** L1044

PHYSICAL DATA

Molecular Weight:	210.23
Molecular Formula:	C ₁₃ H ₁₀ N ₂ O
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 15 mg/ml)
Physical Description:	Dark Blue solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 week.

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