



CERTIFICATE OF ANALYSIS

PRODUCT:	Quinomycin A, [Echinomycin] C ₅₁ H ₆₄ N ₁₂ O ₁₂ S ₂ , M.W. 1101.3, CAS# [512-64-1]
PRODUCT NUMBER:	Q-1112
LOT NUMBER:	A9992
APPEARANCE:	Off-white solid
SOURCE:	Isolated from <i>Streptomyces echinatus</i> (DSM 40013)
SOLUBILITY:	Soluble in 100% ethanol, dimethyl formamide or DMSO; insoluble in water.
PURITY (HPLC):	≥ 98%
IDENTITY:	Identity determined by ¹ H-NMR
PRODUCT DESCRIPTION:	Antitumor antibiotic. Powerful, selective inhibitor of nucleic acid synthesis <i>in vitro</i> . Potent inhibitor of hypoxia-inducible factor 1 (HIF-1) DNA binding activity. Induces apoptosis. Displays antibacterial, antifungal and antiviral activities.
STORAGE & HANDLING:	Store at -20°C. <u>WARNING</u>: HYGROSCOPIC! TOXIC! MAY BE MUTAGENIC!

CAUTION: For laboratory research & scientific manufacturing use only. Not for human or drug use. The pharmacological and toxicological properties of this product have not been fully investigated. Use caution when handling. Do not use this compound if you are not fully trained or are unaware of the hazards involved.

Verified: **KT**