



Certificate of Analysis

Product Name: Doxorubicin HCl, USP Grade
Cat #: D-490
CAS #: 25316-40-9
Lot #: Lot Specific
Retest Date[†]: Lot Specific
Storage: Store desiccated at 4°C.

Test	Specs	Results
Appearance	Orange-red or red crystalline powder	Complies
pH	4.0-5.5	Complies
Water content	≤4.0%	Complies
Impurities		
- Impurity A (doxorubicinone)	≤0.5%	Complies
- Any other unknown impurity	≤0.2%	Complies
- Total unknown impurity	≤0.5%	Complies
- Total impurities	≤2.0%	Complies
Acetone	≤0.5%	Complies
Acetone+Ethanol	≤2.5%	Complies
Dichloromethane	≤0.06%	Complies
Methanol	≤0.3%	Complies
Assay (anhydrous, solvent-free basis)	98.0% to 102.0%	Complies

* GOLD BIOTECHNOLOGY, INC. provides this Certificate of Analysis in good faith. No representation is made as to the accuracy or comprehensiveness of the data and GOLD BIOTECHNOLOGY, INC. shall not be liable for any errors in the data. No representation is made as to the fitness of the data or of the materials for any particular use. User shall exercise its own raw material quality control, including analysis of the material, and shall independently determine the fitness of the data and the material for any use. No representation or warranty is made as to the effectiveness of the material or results obtained using the material, including damages or injury. GOLD BIOTECHNOLOGY, INC. liability is limited to the cost of the material. User assumes all responsibility for compliance with all laws and regulations implicated by use of this material.

† If provided, the Certificate of Analysis (COA) retest date corresponds to the recommended storage conditions provided on the COA. If no retest date is shown, the shelf-life for products is 2 years after purchase when stored according to COA recommendations. Retest dates are not rigid, and often only serve an informational purpose. COA retest dates are supplied by the manufacturer; however, GoldBio product labels may contain different storage recommendations to extend the life of the product beyond the manufacturer retest date or 2 years from purchase.

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