

---

**Certificate of Analysis**

---

Product Name: Quinine hydrochloride  
Cat. No.: GC50054  
Batch No.: 1  
Chemical Name:

**PHYSICAL AND CHEMICAL PROPERTIES**

Cas. No.: 130-89-2  
Molecular Formula:  $C_{20}H_{24}N_2O_2 \cdot HCl$   
Molecular Weight: 360.88  
Storage: Store at  $-20^{\circ}C$   
Chemical Structure:

**ANALYTICAL DATA**

Appearance: solid  
HNMR: Consistent with structure  
HPLC: Consistent with structure  
Purity: >98%  
Conclusion: The product has been tested and complies with the given specifications.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA