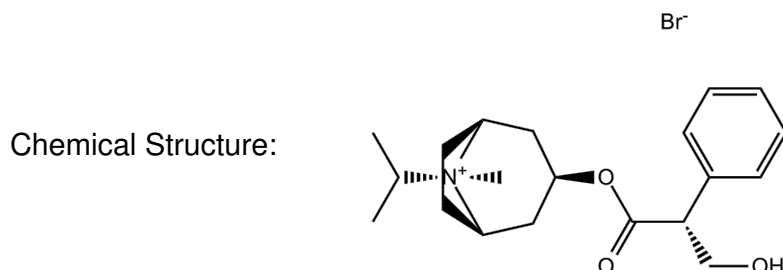


Certificate of Analysis

Product Name: Ipratropium Bromide
Cat. No.: GC12717
Batch No.: 2
Chemical Name: (8-methyl-8-propan-2-yl-8-azoniabicyclo[3.2.1]octan-3-yl) 3-hydroxy-2-phenylpropanoate;bromide

PHYSICAL AND CHEMICAL PROPERTIES

Cas. No.: 22254-24-6
Molecular Formula: $C_{20}H_{30}BrNO_3$
Molecular Weight: 412.37
Storage: Store at $-20^{\circ}C$



ANALYTICAL DATA

Appearance: A solid
HNMR: Consistent with structure
HPLC: Consistent with structure
Purity: $>98.50\%$
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