



Zhengzhou Yuanli Biological Technology Co., Ltd.

郑州原理生物科技有限公司

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Certificate of Analysis

质量检验单

Product Name (产品名称): Lappaconitine Hydrobromide (氢溴酸高乌甲素)	Batch No. (批号): QG2020061401J	
CAS No. (CAS 号): 97792-45-5	Quantity (批量): 69.14kg	
Manufacturing Date (生产日期): 06/14/2020	Expired Date (失效日期): 06/13/2022	
Sampling Date (送检日期): 06/14/2020	Report Date (报告日期): 06/16/2020	
Test Items(检测项目)	Requirements (标准)	Results (结论)
Property (性状)	1. Appearance (外观): almost white to white crystal or crystalline power, odorless, bitter (为白色结晶或结晶性粉末; 无臭、味苦。)	Complies (符合规定)
	2. Solubility (溶解度): Soluble in methanol, slightly soluble in water, extremely slightly soluble in ethanol, also insoluble in chloroform. (在甲醇中溶解, 在水中微溶, 在乙醇中极微溶解, 在三氯甲烷中几乎不溶。)	Complies (符合规定)
	3. Melting point (熔点): 217-221°C	218.2-220.8°C
	4. Specific rotation (比旋度): +29.5~+32.5°	+31.8°
Identification (鉴别)	1. Add silver nitrate solution to Lappaconitine hydrobromide solution, light yellow curdy precipitate appears. (取本品水溶液加硝酸银试液, 即发生微黄色凝乳状沉淀)	Complies (符合规定)
	2. Maximum absorption is at the wavelength of 224nm and 252nm. (在 224、252nm 的波长处分别有最大吸收)	Complies (符合规定)
	3. Drip 1 drop of Dragendorff testing solution to Lappaconitine hydrobromide solution, bisque precipitate appears. (取本品水溶液, 加 1 滴碘化铋钾试液, 即产生桔红色沉淀)	Complies (符合规定)
Test (检查)	Loss on drying should be no more than 1%. (干燥失重小于等于 1%)	0.59%
	PH value (PH 值): 5.5~6.5	6.16
	Transparency: A solution of 0.05g of substance in 10 ml of water must be transparent. (澄清晰度: 0.05g 样品溶于 10ml 水中必须澄清透明)	Complies (符合规定)





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Assay (含量)	$\geq 96.0\%$	99.60%
Conclusion (结论)	The product complies with enterprise standard. (产品符合企业标准。)	
Checker (检验人): Junlin Ma	Rechecker (复检人): Jin Jin	Supervisor (主管): Xuezhe Han