



HANGZHOU FORTUNE BIOPHARM CO.,LTD.

杭州泛青生物医药有限公司

CERTIFICATE OF ANALYSIS

Product Name	L-Glutathione Reduced (Pharm. grade)		
CAS NO.:	70-18-8		
According to	Enterprise Standard	Batch No.	170802
Package	Fiber drum	Manufacturing date	Aug.12,2017
Package Size	25kgs/drum	Report date	Aug.17,2017
Quantity	100kgs	Retest date	Aug.11,2019

Items		Specification	Results
Appearance		White crystals or crystalline powder,almost odorous and taste sour,soluble in water.	Conforms
Identification	Ninhydrin test	Positive	Positive
	IR	IR spectrum should comply with the reference spectrum.	Conforms
Optical Rotation		-15.5~-17.5°	-16.2°
Transmittance		Not less than 98.0%	99.0%
Heavy metals		Not more than 10ppm	Conforms
Arsenic		Not more than 1ppm	Conforms
Iron		Not more than 0.001%	Conforms
Sulfate		Not more than 0.048%	Conforms
Ammonium		Not more than 0.020%	Conforms
Related substances		GSSG :Not more than 1.2%	0.9%
		L- γ -glutamyl-L-cysteineNot more than 0.6%	0.4%
		Unkonwn impurity:Not more than 0.3%	0.1%
		Single unkonwn impurity:Not more than 0.1%	0.07%
		Total impurity: Not more than 1.8%	1.50%
Loss on drying		Not more than 0.5%	0.08%
Residue on ignition		Not more than 0.1%	0.02%
Assay (HPLC)		Not less than 98.0%	99.0%
Conclusion: <u>Complies with Enterprise standard.</u>			

HANGZHOU FORTUNE BIOPHARM CO., LTD.
杭州泛青生物医药有限公司

Add.:279 Zixuan road,Sandun,Xihu,Hangzhou,China.
Tel:0086 571 87621708
Web.:www.ftpharm.com

Fax:0086 571 87621708
Email:info@ftpharm.com