Tel: +86(571) 87039693
Fax:+86(571) 87035681
http://www.sartort.com

SARTORT

# HANGHZHOU SARTORT BIOPHARMA CO., LTD

## CERTIFICATE OF ANALYSIS

| | |
|---|---|
| **Product Name: Glutathione** | |
| Molecular Formula: C20H32N6O12S2 | CAS No.: 70-18-8 |
| Molecular Weight: 612.63 | Quantity: 500kg |
| Batch No.: ST-20200112 | Manufacturing date: 2020.01.12 |

| Item | Specification | Results |
|---|---|---|
| **Appearance** | White to off-white powder | Conforms |
| **Identification** | HPLC RT | Conforms |
| **Specific rotation** | -15.5° ~-17.5° | -16.16° |
| **Chloride** | ≤0.02% | <0.02% |
| **Ammonium (NH4)** | ≤0.02% | <0.02% |
| **Sulfate** | ≤0.03% | <0.03% |
| **Iron(Fe)** | ≤10ppm | <10ppm |
| **Heavy metals(Pb)** | ≤10ppm | <10ppm |
| **Related substances** | Gross contamination≤2.0% | 0.54% |
| | GSSG≤1.5% | 0.22% |
| **Loss on drying** | ≤0.50% | 0.13% |
| **Residue on ignition** | ≤0.10% | 0.02% |
| **Assay** | 98.0~101.0% | 98.66% |
| **Conclusion** | The batch is in compliance with Enterprise Standard. | |

QC: May Liu

Hangzhou Sartort Chemical Co., LTD

QA: Cathy Shen

ADD:Singapore Science and Technology Park, Hangzhou, China, 310018