

## CERTIFICATE OF ANALYSIS

**Product Name:** Tongkat ali extract  
**Botanical Name:** *Eurycome longifolia*  
**Batch Number:** 21111601  
**Quantity:** 300kg

**Expiry date:** 2024/11/15  
**Part Used:** Root  
**Date of Manufacture:** 2021/11/16  
**Date of Analysis:** 2021/11/17

| Item                                   | Specification  | Result   |
|--|--|----------|
| Assay (HPLC)                           | Eurycomanone $\geq 12\%$                                   | 12.03%   |
| <b>Physical &amp; Chemical Control</b> |  |          |
| Appearance                             | Brown yellow Powder  | Complies |
| Odor                                   | Characteristic   | Complies |
| Tasted                                 | Characteristic   | Complies |
| Sieve Analysis                         | 98% pass 80 mesh   | Complies |
| Loss on Drying                         | 5% Max.  | 3.70%    |
| Ash                                    | 5% Max.  | 3.25%    |
| Heavy Metals                           | $\leq 10$ ppm  | Complies |
| As                                     | $\leq 2$ ppm   | Complies |
| Pb                                     | $\leq 2$ ppm   | Complies |
| Hg                                     | $\leq 1$ ppm   | Complies |
| Cd                                     | $\leq 2$ ppm   | Complies |
| <b>Microbiological</b>                 |  |          |
| Total Plate Count                      | 10000 cfu/g Max.   | 100cfu/g |
| Yeast & Mould                          | 1000 cfu/g Max   | 20cfu/g  |
| Coliforms                              | Negative   | Complies |
| Pathogenic bacteria                    | Negative   | Complies |
| <b>Conclusion</b>                      | Complies with specification                                |          |
| Storage                                | In cool & dry place. Keep away from strong light and heat. |          |
| Shelf life                             | 3 years when properly stored.                              |          |
| Packing                                | 25KG/drum, Pack in paper-drums and two plastic-bags inside |          |

QA

QC

Analyst

