Certificate of Analysis

| MedKoo Cat#: | Product Name: | Lot#: |
|--------------|-------------------------|-----------|
| 330224 | Afamelanotide free base | M21C12E08 |

| Chemical name | | | |
|--|--|--|--|
| The amino acid sequence is Ac-Ser-Tyr-Ser-Nle-Glu-His-D-Phe-Arg-Trp-Gly-Lys-Pro-Val- | | | |
| NH2 | | | |
| Synonyms | | | |
| Afamelanotide; CUV1647; CUV-1647; CUV 1647; MBJ 05; MBJ-05; MBJ05; Melanotan I; | | | |
| MT-I; [Nle4,D-Phe7]-α-MSH | | | |
| Chemical structure | CAS# and Theoretical analysis | | |
| HN _≫ NH ₂ O | MedKoo Cat#: 330224 | | |
| OH NH NH H ₂ N | Name: Afamelanotide free base | | |
| HN O HN O HN O | CAS#: 75921-69-6 (free base) | | |
| | Lot#: M21C12E08 | | |
| | Chemical Formula: C ₇₈ H ₁₁₁ N ₂₁ O ₁₉ | | |
| но о | Exact Mass: 1645.8365 | | |
| NH ₂ | Molecular Weight: 1646.874 | | |

| Analysis item | Specifications / Results | |
|--------------------|--|--|
| Appearance | White to off white solid powder | |
| Structure | ¹ H-NMR analysis matches the structure. MS analysis gives the correct molecule weight. Both NMR and MS data are consistent with those reported in the literature. | |
| Purity (HPLC) | >96.0% | |
| Conclusion | This product conforms with MedKoo's quality standards | |
| Shipping condition | Shipped under ambient temperature as non-hazardous chemical. This product is stable for a few weeks during ordinary shipping and time spent in customs. | |
| Storage condition | Short term storage (weeks): 0 – 4 °C under dry condition | |
| | Long term storage (months): -20 °C under dry condition | |
| Shelf life | At least 3 years if properly stored. | |

CAUTION: NOT FULLY TESTED. FOR RESEARCH ONLY, NOT FOR HUMAN USE