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## Certificate of Analysis

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Product Name: [Arg14,Lys15]Nociceptin  
Cat. No.: GC10756  
Batch No.: 1  
Chemical Name: (2S,3Z,5S,6Z,8S,9Z,11S,12Z,14S,15Z,17S,18Z,20S,21Z,23S,24Z,26S,27Z,29S,30Z,32S,33Z,36Z,38S,39Z,41S,42Z,45Z,48Z,50S)-50-amino-8,14,26-tris(4-aminobutyl)-41-benzyl-11,17,29-tris(3-guanidinopropyl)-4,7,10,13,16,19,22,25,28,31,34,37,40,43,46,49-hexadecahydrox

### PHYSICAL AND CHEMICAL PROPERTIES

Cas. No.: 236098-40-1  
Molecular Formula:  $C_{82}H_{137}N_{31}O_{22}$   
Molecular Weight: 1909.16  
Storage: Desiccate at -20°C  
Chemical Structure:

### ANALYTICAL DATA

Appearance: solid  
HNMR: Consistent with structure  
HPLC: Consistent with structure  
Purity: >98%  
Conclusion: The product has been tested and complies with the given specifications.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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