

## Analytical Data Sheet

Lot number **1059343**  
not for drug use

Catalog number **H-1070.0005**  
Product number **4012160.0005**  
Product  **$\alpha$ - MSH (free acid)**  
Ac- Ser- Tyr- Ser- Met- Glu- His- Phe- Arg- Trp- Gly-  
Lys- Pro- Val- OH  
Molecular formula **C<sub>77</sub>H<sub>108</sub>N<sub>20</sub>O<sub>20</sub>S**  
Relative molecular mass **1665.89**

Tests	Results								
Appearance	white lyophilisate								
Appearance of solution	clear, colorless solution (1 mg/mL in 50% acetic acid)								
Identification (ESI-MS)	m = 1665.7u								
Identification (MALDI-MS)	m= 1665.9u (avarage mass)								
Identification (elemental analysis)	<table border="0"> <tr> <td>Theory</td> <td>Found</td> </tr> <tr> <td>C = 55.52 %</td> <td>C = 48.19 %</td> </tr> <tr> <td>H = 6.53 %</td> <td>H = 5.56 %</td> </tr> <tr> <td>N = 16.82 %</td> <td>N = 13.48 %</td> </tr> </table>	Theory	Found	C = 55.52 %	C = 48.19 %	H = 6.53 %	H = 5.56 %	N = 16.82 %	N = 13.48 %
Theory	Found								
C = 55.52 %	C = 48.19 %								
H = 6.53 %	H = 5.56 %								
N = 16.82 %	N = 13.48 %								
Amino acid analysis	Ser 1.97(2) Pro 1.05(1) Phe 1.00(1) Glx 1.02(1) Tyr 1.04(1) Trp det. (1) Gly 1.03(1) Val 1.02(1) His 1.01(1) Met 1.02(1) Arg 1.08(1) Lys 1.00(1)								
Solubility	soluble in AcOH 50 %								
Purity (HPLC)	96.8%(TFA) 96.7%(NaClO <sub>4</sub> )								
Assay (elemental analysis)	79.1%(Nth 16.82%, Nfd 13.31%)								

Latest update: May 12, 2015

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