

## Analytical Data Sheet

Lot number **1056296**  
not for drug use

Catalog number **N-1070.0005**  
Product number **4001242.0005**  
Product **β- Endorphin (30- 31) (bovine, camel, mouse, ovine)**  
H- Gly- Gln- OH  
Molecular formula **C<sub>7</sub>H<sub>13</sub>N<sub>3</sub>O<sub>4</sub>**  
Relative molecular mass **203.20**

Tests	Results
Appearance	white powder
Appearance of solution	clear, colorless solution (50 mg/ml in water)
Identification (ESI-MS)	m = 203.2u (average mass)
Identification (elemental analysis)	Theory Found C = 37.70 % C = 37.61 % H = 6.87 % H = 6.67 % N = 18.84 % N = 18.93 %  calc. as 1.1 H <sub>2</sub> O (8.9 %)
Identification (TLC)	complies with authentic material
Specific optical rotation	$[\alpha]_{365}^{24} = -8.6^{\circ}$ (5% in water)
Purity (TLC)	> 99%
TLC conditions	n-butanol/acetic acid/H <sub>2</sub> O 4/2/2 isopropanol/ammonia conc. 1/1 methanol/chloroform/ammonia 17% 2/2/1 plate: silicagel 60 F <sub>254</sub> detected by: UV, ninhydrin, chlorine-tolidine
Water content (KF volumetric)	9.3%