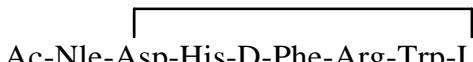


Certification of Analysis

Product Name	<i>Melanotan II Acetate</i>	CAS. No.	121062-08-6
Molecular Formula	$C_{50}H_{69}N_{15}O_9$	Batch No.	2010707
Molecular Weight	1024.2	Manufacturing Date	07/07/2010
Storage	2~8 °C	Retest Date	07/06/2012
Sequence	<div style="text-align: center;">  Ac-Nle-Asp-His-D-Phe-Arg-Trp-Lys-NH₂ </div>		
TEST		SPECIFICATION	RESULT
1	Appearance	White powder	Conforms
2	Solubility	Soluble in water or 1% acetic acid at a concentration of $\geq 1\text{mg/ml}$ to give a clear, colorless solution	Conforms
3	Identity	Monoisotopic Mass: 1024.2 \pm 1.0	1023.7
4	Specific Optical Rotation	-50.0 ~ -60.0°[α] ²⁰ _D (c=0.5, 10% HAc)	-55.66°
5	Amino Acid Composition	Asp: 0.90 ~ 1.10 His: 0.90 ~ 1.10 Arg: 0.90 ~ 1.10 Lys: 0.90 ~ 1.10 Phe: 0.90 ~ 1.10 Trp: Present	0.98 1.02 1.02 0.98 0.97 Present
6	Peptide Purity (By HPLC)	$\geq 98.0\%$ by area integration	99.36%
7	Related Substance (By HPLC)	Total Impurities(%) $\leq 2.0\%$ Largest Single Impurity(%) $\leq 1.0\%$	0.64% 0.16%
8	Acetate Content	$\leq 15.0\%$	8.22%
9	Water Content (Karl Fischer)	$\leq 8.0\%$	3.09%
10	Bacterial Endotoxins	$\leq 5\text{EU/mg}$	Conforms
11	Peptide Content (N determination)	$\geq 80.0\%$	87.99%
12	Assay (By Anhydrous, Acetic Acid-free)	95.0 ~ 105.0%	99.30%

Quality Control By Zhouzhongbing Date: 2010-07-19

Quality Assurance Department