

CERTIFICATE OF ANALYSIS

PRODUCT NAME: LINALOTIDE

REPORT NUMBER: 20110614

REPORT DATE: 20130712

<i>Product Name</i>	Linaclotide	<i>CAS. No.</i>	851199-59-2
<i>Molecular Formula</i>	C ₅₉ H ₇₉ N ₁₅ O ₂₁ S ₆	<i>Batch No.</i>	20110614
<i>Molecular Weight</i>	1526.8	<i>Manufacturing Date</i>	06/14/2011
<i>Storage</i>	<25°C	<i>Retest Date</i>	07/12/2013
<i>Sequence</i>	$\text{NH}_2\text{-Cys-Cys-Glu-Tyr-Cys-Cys-Asn-Pro-Ala-Cys-Thr-Gly-Cys-Tyr-OH}$		
<i>TEST</i>		<i>SPECIFICATION</i>	<i>RESULT</i>
1	<i>Appearance</i>	White powder	Conforms
2	<i>Identity with MS</i>	Monoisotopic Mass:1526.8±1.0	1526.6
3	<i>Water Content(Karl Fischer)</i>	≤6.0%	4.2%
4	<i>Acetate Content</i>	≤2.0%	0.03%
5	<i>Peptide Purity (By HPLC)</i>	≥98.0% by area integration	99.0%
6	<i>Related Substance(By HPLC)</i>	Total Impurities(%)≤2.0%	1.0%
		Largest Single Impurity(%)≤1.0%	0.4%
7	<i>Acetonitrile</i>	≤0.041%	Conforms
8	<i>Peptide Content(N determination)</i>	≥80.0%	91.56%
9	<i>Assay(By Anhydrous, Acetic Acid-free)</i>	95.0~105.0%	95.60%
Caution: Only for Research, Not for Human Use			

CONCLUSION: THIS PRODUCT IS QUALIFIED WITH THE SPECIFICATION

