

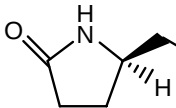


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Certification of Analysis

Product Name		Alarelin Acetate	
CAS. No.	79561-22-1	Batch No.	20100526
Molecular Formula	$C_{56}H_{78}N_{16}O_{12}$	Molecular Weight	1167.3
Manufacturing Date	05/26/2010	Expire Date	05/25/2012
Sequence	 His-Trp-Ser-Tyr-D-Ala-Leu-Arg-Pro-NHEt		
TEST		SPECIFICATION	RESULT
1	Appearance	White powder or almost white powder	Complies
2	Identity by HPLC	The retention is same with the reference substance	Complies
3	Specific Optical Rotation	$-47.0 \sim -57.0^{\circ} [\alpha]_D^{20} (c=1, 1\% \text{HAc})$	-52.0°
4	Amino Acid Composition	Ala: 0.85 ~ 1.10 Arg: 0.85 ~ 1.10 Glu: 0.85 ~ 1.10 Pro: 0.85 ~ 1.10 Leu: 0.90 ~ 1.10 Tyr: 0.85 ~ 1.10 His: 0.85 ~ 1.10 Ser: Present Trp: Present	0.99 0.92 1.02 1.05 1.00 1.01 0.96 0.89 Present
5	Related Substance (By HPLC)	Total Impurities (%) $\leq 2.0\%$ Largest Single Impurity (%) $\leq 1.0\%$	0.88% 0.25%
6	Acetate Content	$\leq 15\%$	11.5%
7	Water Content (Karl Fischer)	$\leq 5.0\%$	2.50%
8	Serility	$\leq 50 \text{ CFU/100 mg}$	Complies
9	Bacterial Endotoxins	$\leq 5 \text{ IU/mg}$	Complies
10	Assay (By anhydrous, acetic acid-free)	97% ~ 103%	98.5%

Quality Control By Zhouzhongbing Date: 2010-05-31

Quality Assurance Department