Print Date: Feb 26th 2014

Certificate of Analysis

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Product Name: CGP 42112 **Catalog No.: 2569** **Batch No.: 2**

CAS Number: 127060-75-7

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	$C_{52}H_{69}N_{13}O_{11}$
Batch Molecular Weight:	1052.2
Physical Appearance:	white lyophilised solid
Net Peptide Content:	71.1%
Counter Ion:	TFA
Solubility:	Soluble to 1 mg/ml in water
Storage:	Desiccate at -20°C
Peptide Sequence:	N-α-Nicotinoyl-Tyr-Lys-(N-α-Z-Arg)-His-Pro-Ile

2. ANALYTICAL DATA

HPLC:	Shows 99.2% purity
Mass Spectrum:	Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid	Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala			Lys	1.00	0.98
Arg	1.00	1.04	Met		
Asx			Phe		
Cys			Pro	1.00	1.04
Glx			Ser		
Gly			Thr		
His	1.00	1.01	Trp		
Ile	1.00	0.98	Tyr	1.00	0.82
Leu			Val		

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Description:

Selective, high affinity angiotensin AT_2 receptor ligand (K_i = 0.24 nM). Displays agonistic properties at proximal tubule AT_2 receptors, causes Na^+, K^+-ATPase inhibition and sodium excretion. Antagonizes Ang-II induced contractions in rabbit aortic rings (IC_{50} = 1850 nM).

Physical and Chemical Properties:

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Physical Appearance: white lyophilised solid

Peptide Sequence:

N-α-Nicotinoyl-Tyr-Lys-(N-α-Z-Arg)-His-Pro-Ile

Storage: Desiccate at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml in water

Net Peptide Content: 71.1% (Remaining weight made up of counterions and residual water).

Counter Ion: TFA

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

References:

Criscione *et al* (1990) Binding characteristics and vascular effects of various angiotensin II antagonists. J.Cardiovas.Pharmacol. ***16*** (Suppl. 4) S56.

Naveri (1995) The role of angiotensin receptor subtypes in cerebrovascular regulation in the rat. Acta.Physiol.Scand.Suppl. ***630*** 1. PMID: 8610501.

Hakam and Hussain (2006) Angiotensin II AT_2 receptors inhibit proximal tubular Na^+-K^+-ATPase activity via a NO/cGMP-dependent pathway. Am.J.Physiol.Renal Physiol. ***290*** F1430. PMID: 16380464.