

Certificate Of Analysis

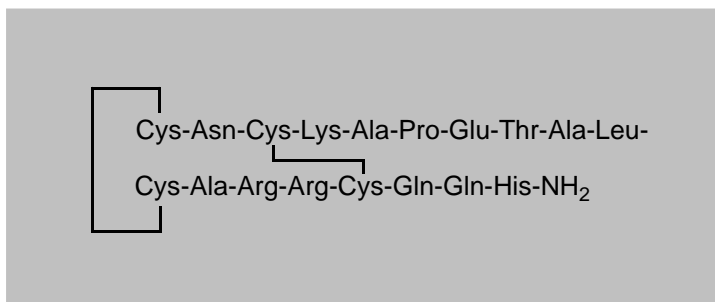
Quality Control Testing and Research Application

COA Preparation Date: 08/08/2011
COA Revision Date: 08/08/2014

Product: Apamin
Cat. No: BP0038
Batch No: 0038BP/03
Chemical Name:

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₇₉H₁₃₁N₃₁O₂₄S₄
Batch Molecular Weight: 2027.34
CAS No: [24345-16-2]
Physical Appearance: White lyophilised solid
Melting Point:
Solubility: Soluble to 1 mg/ml in water
Storage: Desiccate at -20° C
Batch Molecular Structure:



Product Description: Highly selective and potent small-conductance Ca²⁺-activated K⁺-channel (SK_{Ca}) inhibitor. The only polypeptide neurotoxin that is known to pass the blood-brain barrier. Blocks medium after-hyperpolarisation *in vitro* and is convulsive *in vivo*.

References: 1. Habermann (1984) Pharmac Ther 25:255; 2. Strong (1990) Pharmac Ther 46:137; 3. van der Staay et al. (1999) Neurosci Biobehav Rev 23:1087; 4. Stocker et al. (2004) Toxicon 43:933

- CAUTION - Not fully tested. For Research use only. Not for human use. -

Certificate Of Analysis
Quality Control Testing and Research Application

COA Preparation Date: 08/08/2011
 COA Revision Date: 08/08/2014

BP0038 Apamin

2. ANALYTICAL DATA

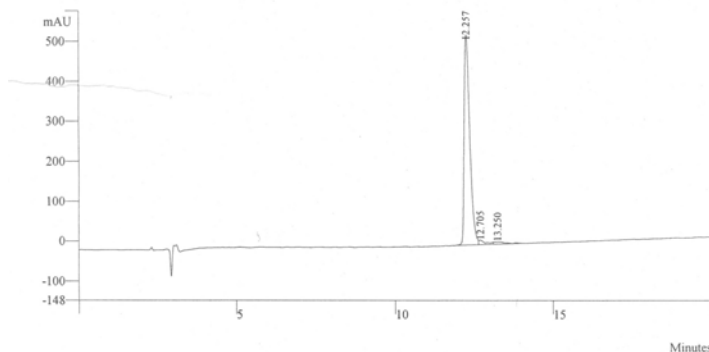
HPLC: corresponds to the reference

MS: corresponds to the reference

Tests: Counter Ion: Trifluoroacetate; Peptide Content: 71.2%; HPLC Assay: 95.4% (complies).

Data File: c:\star\data\41-0-23\w08054t1
 Channel: 1 = UV RESULTS
 Sample ID: Manual Sample
 Instrument (Inj): Waters 2695
 Injection Date: 08/26/2009 03:33:16
 Injection Method: c:\star\methods\left side method.mth
 Run Time (min): 20.000
 Calc Date: 08/26/2009 04:01:58
 Times Calculated: 4
 Calculation Method: c:\star\data\350033\w08054t1
 Run Mode: Analysis
 Peak Measurement: Peak Area
 Calculation Type: Percent

Wavelength: 215nm; Flow rate: 1.2 ml/min; Buffer A: 0.1% TFA in Water; Buffer B: 0.1% TFA in Acetonitrile. Temp.:
 Column: Discovery, C18, 4.6 mm x 250 mm, 5 micron; Gradient(Linear): 5%-25% Buffer B in 20 min.; Inj. Vol.: 20 ul
 Analyst: Shilpa Patel,



Peak No	Result (%)	Ret Time (min)	Peak Area (counts)	Peak Height (counts)
1	95.4	12.257	6635353	525934
2	2.5	12.705	170551	11350
3	2.2	13.250	150297	5817
	100.1		6956201	543101

- CAUTION - Not fully tested. For Research use only. Not for human use. -