



AMERICAN PEPTIDE COMPANY

A MEMBER OF THE BACHEM GROUP

Certificate of Analysis

Product Name: Dynorphin A (1-17)

Product #: 26-4-12

Lot #: 1406002T

Sequence: Tyr - Gly - Gly - Phe - Leu - Arg - Arg - Ile - Arg - Pro - Lys - Leu - Lys - Trp - Asp - Asn - Gln

Molecular Weight: 2147.5 amu

Mass Spectral Analysis: MALDI-TOF "Exhibits correct MW"
(see attached MS spectrum)

HPLC Analysis: Peptide Purity: 95.6 %
(see attached RP-HPLC chromatogram)

Solubility: 1 mg/mL in water

Appearance: White lyophilized powder

Peptide Content: 75.9 %

Counter Ion: Trifluoroacetate

Date of Mfg: 06/02/14

Amino Acid Analysis:

	<u>Calc.</u>	<u>Found</u>	<u>Remarks</u>		<u>Calc.</u>	<u>Found</u>	<u>Remarks</u>		<u>Calc.</u>	<u>Found</u>	<u>Remarks</u>
Arg	3.00	2.82		Ile	1.00	0.86		Pro	1.00	1.01	
Asx	2.00	2.07		Leu	2.00	2.00		Trp	1.00	0.00	*1
Glx	1.00	1.00		Lys	2.00	1.95		Tyr	1.00	1.15	
Gly	2.00	2.05		Phe	1.00	0.92					

Remarks: *1 Trp was completely destroyed in the sample during hydrolysis for running Amino Acid Analysis.
Not for use in humans, research purposes only.
IMPORTANT: Store in Freezer (-15°C or colder) Immediately Upon Arrival. Please follow recommended solubility information provided above; no guarantee per other methods.

Quality Assurance By: Shruti Patel
Quality Control Department

Date: 06/11/14

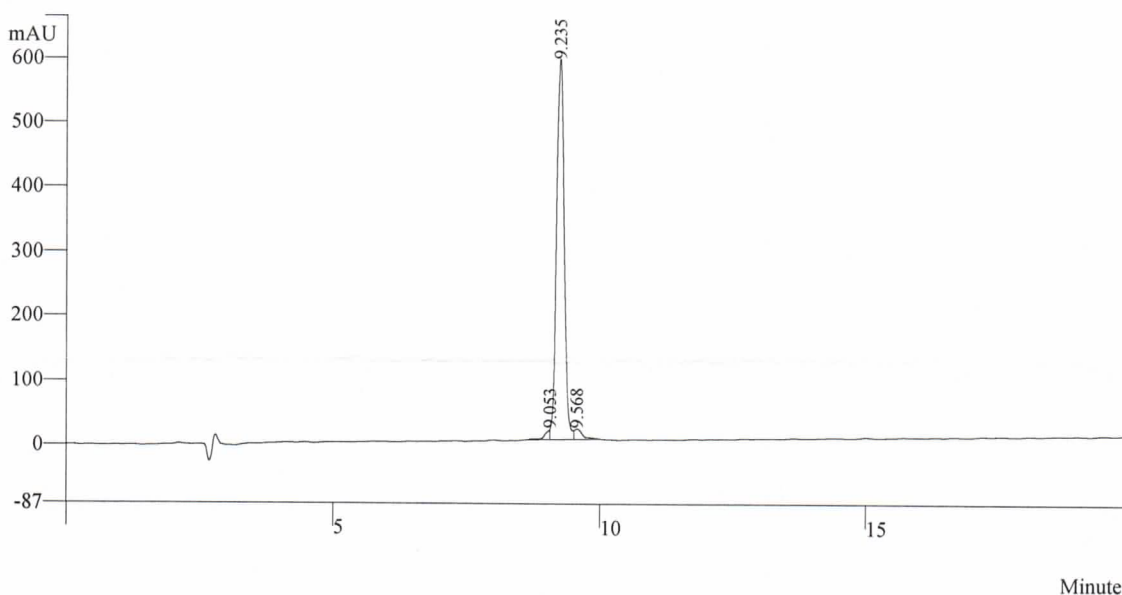
American Peptide Company, Inc.

HPLC Analysis Report

Product Number/Lot Number: 26-4-12 / 1406002T

Data File:	c:\star\data\369948\1406002t001.run	Calc Date:	06/04/2014 10:40:17
Channel:	1 = UV RESULTS	Times Calculated:	4
Sample ID:	1406002T	Calculation Method:	c:\star\data\369948\1406002t001-1.mth
Instrument (Inj):	Waters 2695	Run Mode:	Analysis
Injection Date:	06/04/2014 10:09:45	Peak Measurement:	Peak Area
Injection Method:	c:\star\methods\left side method.mth	Calculation Type:	Percent
Run Time (min):	20.000		

Wavelength: 215nm; Flow rate: 1.2 mL/min; Buffer A: 0.1% TFA in Water; Buffer B: 0.1% TFA in Acetonitrile; Temp.: RT
 Column: Discovery, C18, 4.6 mm x 250 mm, 5 micron; Gradient (Linear): 20% - 40% Buffer B in 20 mins.; Inj. Vol.: 20 uL
 Analyst: Shilpa Patel



Peak No	Result (%)	Ret Time (min)	Peak Area (counts)	Peak Height (counts)
1	1.7	9.053	102939	16484
2	95.6	9.235	5944933	591691
3	2.8	9.568	171660	16012
	100.1		6219532	624187

peptide: 26-4-12

lot: 1406002T

