

Certificate of Analysis

ERC, Inc

Sample Name:	Proteinxyme (Chocolate)	Covance Sample:	4708793
Project ID	ERC-20160206-0001	Receipt Date	04-Feb-2016
PO Number	9225	Receipt Condition	Ambient temperature
Lot Number	153450	Login Date	06-Feb-2016
Sample Serving Size	28 g	Storage Condition	Ambient temperature
		Online Order	20

Analysis	Result
Amino Acids	
Aspartic Acid	1.37 g/Serving Size
Threonine	0.456 g/Serving Size
Serine	0.650 g/Serving Size
Glutamic Acid	2.26 g/Serving Size
Proline	0.563 g/Serving Size
Glycine	0.596 g/Serving Size
Alanine	0.605 g/Serving Size
Valine	0.666 g/Serving Size
Isoleucine	0.588 g/Serving Size
Leucine	1.05 g/Serving Size
Tyrosine	0.504 g/Serving Size
Phenylalanine	0.689 g/Serving Size
Lysine	0.762 g/Serving Size
Histidine	0.288 g/Serving Size
Arginine	1.33 g/Serving Size
Cystine	0.145 g/Serving Size
Methionine	0.198 g/Serving Size
Tryptophan	
Tryptophan	0.178 g/Serving Size

Method References	Testing Location
-------------------	------------------

Amino Acids (TAALC_S:17)	Covance Laboratories - Madison
---------------------------------	---------------------------------------

R. Schuster, "Determination of Amino Acids in Biological, Pharmaceutical, Plant and Food Samples by Automated Precolumn Derivatization and HPLC", Journal of Chromatography, 1988, 431, 271-284.

Henderson, J.W., Ricker, R.D. Bidlingmeyer, B.A., Woodward, C., "Rapid, Accurate, Sensitive, and Reproducible HPLC Analysis of Amino Acids, Amino Acid Analysis Using Zorbax Eclipse-AAA columns and the Agilent 1100 HPLC," Agilent Publication, 2000. Barkholt and Jensen, "Amino Acid Analysis: Determination of Cysteine plus Half-Cystine in Proteins after Hydrochloric Acid Hydrolysis with a Disulfide Compound as Additive", Analytical Biochemistry, 177, 318-322 (1989).

Henderson, J.W., Brooks, A., "Improved Amino Acid Methods using Agilent Zorbax Eclipse Plus C18 Columns for a Variety of Agilent LC Instrumentation and Separation Goals," Agilent Application Note 5990-4547 (2010).

Certificate of Analysis

ERC, Inc

Method References**Testing Location****Tryptophan (TRPLC_S:13)****Covance Laboratories - Madison**

Official Methods of Analysis of AOAC INTERNATIONAL, AOAC International Gaithersburg, MD, USA, Official Method 988.15.

R. Schuster, "Determination of Amino Acids in Biological, Pharmaceutical, Plant and Food Samples by Automated Precolumn Derivatization and HPLC", Journal of Chromatography. 1988, 431, 271-284.

Henderson, J.W., Ricker, R.D. Bidlingmeyer, B.A., Woodward, C., "Rapid, Accurate, Sensitive, and Reproducible HPLC Analysis of Amino Acids, Amino Acid Analysis Using Zorbax Eclipse-AAA columns and the Agilent 1100 HPLC," Agilent Publication, 2000.

Henderson, J.W., Brooks, A., "Improved Amino Acid Methods using Agilent Zorbax Eclipse Plus C18 Columns for a Variety of Agilent LC Instrumentation and Separation Goals," Agilent Application Note 5990-4547 (2010).

Testing Location(s)**Released on Behalf of Covance by****Covance Laboratories - Madison****Lori Ross - Associate Director**

Covance Laboratories Inc.
3301 Kinsman Blvd
Madison WI 53704
800-675-8375 x4170



2918.01

These results apply only to the items tested. This certificate of analysis shall not be reproduced, except in its entirety, without the written approval of Covance.