



Certificate of Analysis

Sample Description: peanut butter
Client: Michael Gabrielli
Sample Mass: 425 g

Sample Numbers: S0002201
Receipt Date: 2017-12-27
Test Date: 2018-01-12
Shipment Temp: Ambient
Storage Temp: Ambient

Samples:				Results:		
Sample ID#	Sample Description/ UPC Code	Lot # and Expiration Date	Sample Volume / Mass	Glyphosate (ng/g)	AMPA (ng/g)	Effective Glyphosate Level (ng/g)
S0002201	Skippy / Natural peanut butter spread with Honey / 037600105088	LR3 20:15 / Best by Dec 30 18	425 g	7.98	2.49	11.71

Methods

Sample Analysis: HRI TM #8 "Glyphosate and AMPA Detection by LC-MS/MS"

Sample preparation employed a modification of the method described in Chamkasem, Narong, Cynthia Morris, and Tiffany Harmon. 2016. "Direct Determination of Glyphosate, Glufosinate, and AMPA in Milk by Liquid Chromatography/tandem Mass Spectrometry." *Journal of Regulatory Science* 3 (2): 20–26.

LC-MS/MS analysis employed a modification of the method described in Jensen, Pamela K., Chad E. Wujcik, Michelle K. McGuire, and Mark A. McGuire. 2016. "Validation of Reliable and Selective Methods for Direct Determination of Glyphosate and Aminomethylphosphonic Acid in Milk and Urine Using LC-MS/MS." *Journal of Environmental Science and Health, Part B* 51 (4): 254–59. doi:10.1080/03601234.2015.1120619.

Limit of Quantitation (LOQ) and Limit of Detection (LOD) are sub-part per billion for this method and are determined for each sample.

Effective Glyphosate Level calculated according to Food and Agriculture Organization (FAO) method where total glyphosate residue is the sum of the weight of glyphosate + 1.5 × the weight of its metabolite AMPA.

Released on Behalf of HRI Laboratories by

Dr. John Fagan, Sr. Scientist

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