

# Spirulina <sup>15</sup>N for SILAM

(Stable Isotope Labeling in Mammals)



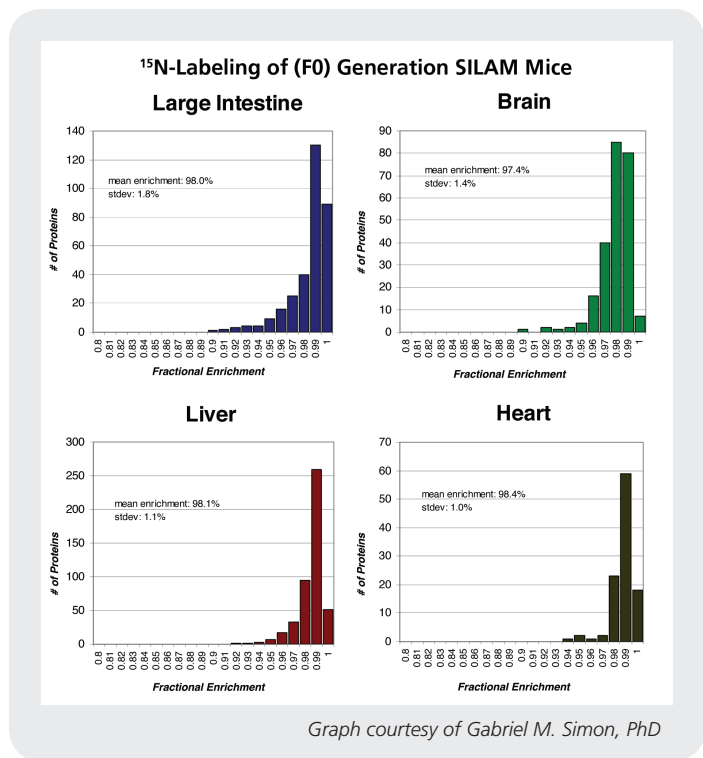
## Spirulina (<sup>15</sup>N, 98%+)

Spirulina (<sup>15</sup>N, 98%+) – a unique blue-green algae, in combination with a protein/amino acid-free nutrient mix – provides an efficient feed to metabolically label the entire animal proteome with <sup>15</sup>N. A <sup>15</sup>N rodent diet can be prepared by a custom-diet vendor (see Table 1) or in your laboratory using <sup>15</sup>N Spirulina. Please refer to McClatchy, D.B. and Yates, J.R., III. **2008**. Stable Isotope Labeling of Mammals (SILAM). Cold Spring Harb. *Protoc*, doi:10.1101/pdb.prot4940.

Catalog No.	Description
NLM-8401	Spirulina whole cells (lyophilized powder) ( <sup>15</sup> N, 98%+)
ULM-8453	Spirulina whole cells (lyophilized powder) (unlabeled)

CIL can also provide custom-prepared diets for your labeling experiments, consulting with a custom-diet vendor.

*Minimum orders may apply.*



“The use of <sup>15</sup>N Spirulina\* diet for generating SILAM mice was very straightforward and effective. The mice seemed to prefer the Spirulina chow to their normal diet, and behaved and bred normally over multiple generations while consuming this food. Labeling efficiency was very high (~98% enrichment) after only a single generation.”

– Gabriel M. Simon, PhD  
Laboratory of Dr. Jeffrey I. Gordon  
Washington University

\*<sup>15</sup>N Spirulina manufactured by CIL.

Table 1		
Macronutrient information for a representative Spirulina <sup>15</sup> N-containing diet. Spirulina is the sole source of nitrogen.		
	% by weight	% kcal from
Protein	18.0	20.0
CHO	53.0	55.0
Fat	10.5	25.0
Kcal/g	3.8	

Protein content = N x 6.25, where N = nitrogen content  
Macronutrient information provided by Harlan Laboratories, Inc.