



CIL

Cambridge Isotope Laboratories, Inc.
isotope.com

RESEARCH PRODUCTS

MouseExpress® Mouse Tissue

L-Lysine (¹³C₆, 97%) Enriched



MouseExpress® Labeled Mouse Tissue

Cambridge Isotope Laboratories, Inc. (CIL) is pleased to add intact stable isotope-enriched mouse tissue to its growing suite of products to assist the mass spectrometry proteomic community. The use of enriched mouse tissue as an internal standard allows for proteomic investigation at the tissue level^{1,2} and will accelerate the quantitative proteome comparison across biological samples.

MouseExpress® L-Lysine (¹³C₆, 97%) Enriched Mouse Tissue is freshly frozen, intact mouse tissue



Specifications:

Strain: C57BL/6

Age: 6-9 weeks

Isotope enrichment: ¹³C₆ in Lysine >97%

Incorporation efficiency of Lys6 into peptides extracted from LysC digested mouse blood is determined with a single LC/MS run, by evaluating the ratios between labeled (Lys6) and unlabeled (Lys0) for all detected peptides.

Form: Intact tissue

Storage: -80° C

Tissues:

Adipotic tissue (white)	Heart	Serum
Adipotic tissue (brown)	Kidney	Skin
Bladder	Liver	Spleen
Brain	Lung	Stomach
Breast	Muscle	Testes
Eye	Ovary	Thymus

Various tissues, ages and sexes are available. Please inquire.

“The heavy labeled mouse tissue from CIL was extremely useful to validate labeled tissue produced in our own laboratory. We isolated peptides from the CIL tissue and ran our own independent analysis on a mass spectrometer. Based on these analyses we were confident to move forward with our proteomics experiments.”

– Dr. Jesse Rinehart
Yale University School of Medicine
Department of Genetics

“The addition of SILAM standards prepared from CIL’s MouseExpress® brain tissue to subcellular fractionation and targeted LC-SRM/MS methodologies represents an essential powerful new tool for the study of neuropsychiatric illness.”

– Matthew L. MacDonald, PhD
University of Pittsburgh
Translational Neuroscience Program

References

- Boettger, T.; Beetz, N.; Kostin, S.; Schneider, J.; Krüger, M.; Hein, L.; Braun, T. **2009.** Acquisition of the contractile phenotype by murine arterial smooth muscle cells depends on the Mir143/145 gene cluster. *J Clin Invest*, 119(9), 2634-2647.
- McClatchy, D.B.; Dong, M.Q.; Wu, C.C.; Venable, J.D.; Yates, J.R., III. **2007.** ¹⁵N metabolic labeling of mammalian tissue with slow protein turnover. *J Proteome Res*, 6(5), 2005-2010.