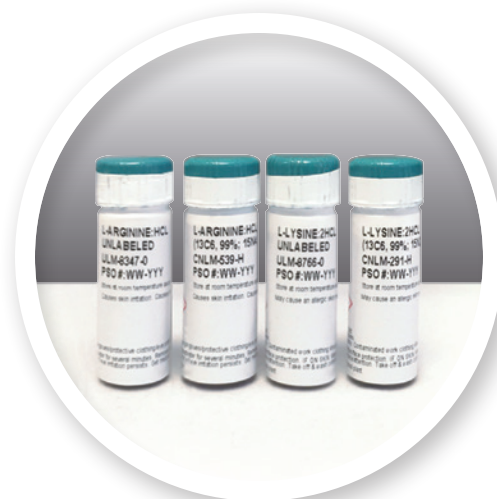




SILAC Kits and Reagents

Stable Isotope Labeling with Amino Acids in Cell Culture



Stable isotope incorporation into protein has proven to be a powerful technology for quantitatively comparing the proteomes of multiple samples. Although isotopes can be incorporated metabolically or chemically, the SILAC method (utilizes metabolic incorporation) has emerged as one of the most powerful techniques for MS-based quantitative applications (see references on reverse).

Cambridge Isotope Laboratories, Inc. (CIL) is pleased to offer the following products for SILAC-based, quantitative proteomic studies.

Amino Acids

L-Arginine (L-Arg)

Catalog No.	Description	Shift from Unlabeled
CLM-2265-H*	L-Arginine-HCl (¹³ C ₆ , 99%)	+6 Da
CNLM-539-H*	L-Arginine-HCl (¹³ C ₆ , 99%; ¹⁵ N ₄ , 99%)	+10 Da
ULM-8347	L-Arginine-HCl (unlabeled)	N/A

L-Lysine (L-Lys)

Catalog No.	Description	Shift from Unlabeled
CLM-2247-H*	L-Lysine-2HCl (¹³ C ₆ , 99%)	+6 Da
DLM-2640	L-Lysine-2HCl (4,4,5,5-D ₄ , 96-98%)	+4 Da
DLM-2641	L-Lysine-2HCl (3,3,4,4,5,5,6,6-D ₈ , 98%)	+8 Da
CNLM-291-H*	L-Lysine-2HCl (¹³ C ₆ , 99%; ¹⁵ N ₂ , 99%)	+8 Da
ULM-8766	L-Lysine-2HCl (unlabeled)	N/A

L-Leucine (L-Leu)

Catalog No.	Description	Shift from Unlabeled
CLM-2262-H*	L-Leucine (¹³ C ₆ , 99%)	+6 Da
CNLM-281-H*	L-Leucine (¹³ C ₆ , 99%; ¹⁵ N, 99%)	+7 Da
ULM-8203	L-Leucine (unlabeled)	N/A

*H denotes highly enriched amino acid (i.e., 99%, as revealed by GC-MS).

Note: Chemical purity (CP) is 98% or greater, unless otherwise specified.

Kits and Media

Catalog No.	Description
DMEM-LYS-C	SILAC Protein Quantitation Kit DMEM Kit contains: • SILAC DMEM Media (2 × 500 mL) • Dialyzed FBS (1 × 100 mL) • L-Lysine-2HCl (¹³ C ₆ , 99%) (50 mg) • L-Lysine-2HCl (50 mg) • L-Arginine-HCl (2 × 50 mg)
DMEM-500	DMEM Media for SILAC (DMEM minus L-Lys and L-Arg)
RPMI-LYS-C	SILAC Protein Quantitation Kit RPMI 1640 Kit contains: • SILAC RPMI 1640 Media (2 × 500 mL) • Dialyzed FBS (1 × 100 mL) • L-Lysine-2HCl (¹³ C ₆ , 99%) (50 mg) • L-Lysine-2HCl (50 mg) • L-Arginine-HCl (2 × 50 mg)
RPMI-500	RPMI 1640 Media for SILAC (minus L-Lys and L-Arg)
FBS-100	Dialyzed Fetal Bovine Serum

Note: SILAC media and dialyzed FBS are manufactured by Thermo Fisher Scientific. SILAC media is provided by Thermo Fisher Scientific under license from the University of Washington and protected by US Patent 6,653,076, for research use only.

Applications

- Peptide/protein identification
- Protein expression profiling (i.e., normal vs. disease cells)
- Signaling pathway evaluation
- Relative protein quantification

Additional products for quantitative proteomics can be found on isotope.com.

Please see other side for additional products of interest ►

Other Products of Interest

L-Azidohomoalanine-HCl (AHA)

AHA and heavy AHA (hAHA) can be used to evaluate the synthesis and turnover of newly synthesized proteins *in vivo* through targeted or untargeted MS analysis (e.g., Yates JR et al. JPR 2015). CIL is pleased to offer AHA and hAHA for use in SILAC applications. Please inquire for pricing.

Catalog No.	Description
CNLM-9461	L-Azidohomoalanine-HCl (1,2,3,4- ¹³ C ₄ , 99%; 2,4- ¹⁵ N ₂ , 98%)
ULM-9460	L-Azidohomoalanine-HCl (unlabeled)

Please visit isotope.com/applications →
Proteomics → Metabolic Labeling → SILAC
for more information.

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