

# SILAC™ Protein ID & Quantitation Media Kit

Cat. nos. MS10030, MS10031, MS10032, MS10033

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Brief instructions for preparing SILAC™ Flex Media are described below. For protocols describing protein identification (ID) and quantitation using SILAC™ media, refer to the manual supplied with the kit (also available at [www.invitrogen.com](http://www.invitrogen.com)). See **Notes** on the other side of this card before preparing the media.

Remove an appropriate amount of medium from each 1 L bottle of SILAC™ Flex Media so that the final volume is 1 L after the required components (see table) have been added.

Reagent	D-MEM-Flex (MS10030)	RPMI-Flex (MS10031)	IMDM-Flex (MS10032)	Advanced D-MEM/F12-Flex (MS10033)
<b>Glucose Solution (200 g/L)</b>	High Glucose 22.5 mL Low Glucose 5 mL	10 mL	22.5 mL	15.8 mL
<b>L-Glutamine 200 mM (100X)</b>	10 mL*	10 mL	10 mL*	10 mL*
<b>Phenol Red Solution (10 g/L)</b>	1.5 mL	0.5 mL	1.5 mL	0.8 mL
<b>FBS, Dialyzed</b>	100 mL	100 mL	100 mL	5–20 mL
<b>Penicillin-Streptomycin (100X)</b>	10 mL	10 mL	10 mL	10 mL
<b>Light (normal) Amino Acids</b>	Resuspend 1 × 100 mg L-Lysine HCl and 2 × 100 mg L-Arginine each in 1 mL basal, unsupplemented medium. Mix well. To one 1 L bottle of medium, add L-Lysine HCl (100 mg/mL) and L-Arginine (100 mg/mL) to prepare light media.			
<b>Heavy (isotopic) Amino Acids</b>	Resuspend 100 mg isotopic-L-Lysine (*Lys) in 1 mL basal, unsupplemented medium. Mix well. To prepare single labeling medium supplemented with light arginine and heavy (isotope labeled) lysine, add *Lys (100 mg/mL) and L-Arginine (100 mg/mL) to the second 1 L bottle of medium. To prepare double labeling medium supplemented with heavy (isotope labeled) lysine and heavy arginine, add *Lys (100 mg/mL) and *Arg (100 mg/mL) to the second 1 L bottle of medium.			
<b>pH Range</b>	7.0–7.4	7.0–7.4	6.9–7.3	7.0–7.4
<b>Osmolality (mOsm/kg)</b>	320–350	265–300	270–310	290–330
<b>Filtration and Storage</b>	Filter sterilize each medium using 0.22 µm filtration device. Store the medium at 2 to 8°C until use.			

\*Optional: Add 20 mL L-Glutamine for each 1L of medium if the media is to be used over an extended period of time, or if higher concentrations of L-Glutamine is required. See **Accessory Products** for ordering information on additional L-Glutamine (100X).

#### Intended Use

For research use only. Not intended for any animal or human therapeutic or diagnostic use.

# SILAC™ Protein ID & Quantitation Media Kit, continued

## Notes

- D-MEM Flex Medium does not contain sodium pyruvate. Purchase sodium pyruvate separately from Invitrogen (cat. no. 11360-070), if sodium pyruvate is required for cell growth.
- Do not add Phenol Red Solution to the medium when studying secreted proteins. If Phenol Red Solution is not added to the medium, monitor the pH of the medium or cell density.
- Supplemented Flex Medium contains up to 10% dialyzed FBS. If higher concentration of dialyzed FBS is required for cell growth, purchase dialyzed FBS separately (cat. no. 26400-036).
- Addition of Penicillin-Streptomycin is optional but highly recommended. You may supplement the medium with additional growth factors or cytokines, if needed for your specific cell line.
- To prepare double labeling medium, purchase isotopic-L-Arginine (\*Arg) separately from Invitrogen (see below).

## Accessory Products

The table below lists additional products available separately from Invitrogen. For more information about these products, refer to our website ([www.invitrogen.com](http://www.invitrogen.com))

Product	Quantity	Catalog No.
SILAC™ [U-13C6, 15N4]-L-Arginine (*Arg)	100 mg	MS10009
SILAC™ [U-13C6]-L-Arginine (*Arg)	100 mg	MS10011
SILAC™ Phosphoprotein Identification and Quantitation Kit with D-MEM and [U-13C6]-L- Lysine (*Lys)	1 kit	SP10001
with RPMI 1640 and [U-13C6]-L-Lysine (*Lys)	1 kit	SP10005
SILAC™ Membrane Protein Identification and Quantitation Kit with D-MEM and [U-13C6]-L- Lysine (*Lys)	1 kit	SM10002
with RPMI 1640 and [U-13C6]-L-Lysine (*Lys)		SM10006
1-D PAGE Cleavable ICAT® Reagent Application Kit	1 kit	MS10012
Cleavable ICAT® (10 assay Kit)	1 kit	MS10022
Cleavable ICAT® Bulk Reagent Kit	1 kit	MS10010
iTRAQ™ Reagents Methods Development Kit	1 kit	MS10013
iTRAQ™ Reagents MultiPlex Kit	1 kit	MS10016
Invitrosol™ LC/MS Protein Solubilizer (5X)	1 kit	MS10007
NuPAGE® Novex® 4-12% Bis-Tris Gel, 10 well, 1.0 mm	1 box of 10 gels	NP0321BOX
L-Glutamine (100X), 200 mM	20 mL	25030-149

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This product is covered by Limited Use Label Licenses No. 5 and 161. See the manual or go to [www.invitrogen.com](http://www.invitrogen.com) for detailed information.