

## Product Information

### SILu™MAB Rituximab - Stable Isotope Labeled Monoclonal Antibody Standard

recombinant, expressed in CHO cells

Catalog Number **MSQC13**  
Storage Temperature  $-20\text{ }^{\circ}\text{C}$

#### Product Description

SILu™MAB Rituximab is a recombinant, stable isotope-labeled, monoclonal antibody which incorporates [ $^{13}\text{C}_6$ ,  $^{15}\text{N}_4$ ]-Arginine and [ $^{13}\text{C}_6$ ,  $^{15}\text{N}_2$ ]-Lysine. Expressed in CHO cells, SILuMAB Rituximab is designed to be used as a internal standard for analysis of Rituximab in human serum.

Recommended surrogate peptide sequences are indicated in Table 1. Suggested MRM parameters are available for download in several formats on the product display page at [www.sigmaaldrich.com](http://www.sigmaaldrich.com).

Each vial of SILuMAB Rituximab contains the labeled antibody lyophilized from a solution of phosphate buffered saline. Vial content was determined by measuring  $A_{280}$  and using an extinction coefficient ( $E^{0.1\%}$ ) of 1.4.

#### Sequence Information

SILuMab Rituximab Heavy Chain:

QVQLQQPGAELVKPGASVKMSCKASGYTFTSYNMH  
WVKQTPGR**GLEWIGAIYPGNGDTSYNQK**FKGKATLT  
ADKSSSTAYMQLSSLTSEDSAVYYCARSTYYGGDWY  
FNVWVAGTTVTVSAASTKGPSVFPLAPSSKSTSGGT  
AALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQ  
SSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVD  
KKAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKD  
TLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH  
NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKC  
KVSNAKALPAPIEKTISKAKGQPREPQVYTLPPSRDEL  
KNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTPP  
PVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEA  
LHNHYTQKSLSLSPG

SILuMab Rituximab Light Chain:

QIVLSQSPAILSASPGEKVTMTCRASSSVSYIHWFQQ  
KPGSSPKPWYATSNLASGVPVRF**SGSGSGTSYSLTI**  
**SR**VEAEDAATYYCQWTSNPPTFGGGTKLEIKRTVA  
APSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQW  
KVDNALQSGNSQESVTEQDSKDSTYLSSTLTLSKA  
DYEKHKVYACEVTHQGLSSPVTKSFNRGEC

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

#### Preparation Instructions

SILuMAB Rituximab recovery is maximized when 0.1% formic acid is used to reconstitute the lyophilized product. Reconstitution with other solvents may reduce recovery. Do not freeze after reconstitution.

1. Briefly centrifuge the vial at  $10,000 \times g$  to collect the product at the bottom of the vial.
2. Add 500  $\mu\text{L}$  of 0.1% formic acid in ultrapure water to the vial.
3. Mix the contents by gently inverting the vial a minimum of 5 times.
4. Allow the vial to stand at room temperature for at least 15 minutes and repeat mixing by inversion.

#### Storage/Stability

Store the lyophilized product at  $-20\text{ }^{\circ}\text{C}$ .

#### Legal Information

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SILu is a trademark of Sigma-Aldrich Co. LLC.

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**Table 1.**

Rituximab-Specific Peptide Sequences Liberated from SiLuMAb Rituximab by Tryptic Digest

<b>Universal Peptide Sequence</b>	<b>Location</b>
FSGSGSGTSYSLTISR	LC
GLEWIGAIYPGNGDTSYNQK	HC