

Product Information

SILu™ MAb Infliximab - Stable Isotope Labeled Monoclonal Antibody Standard

recombinant, expressed in CHO cells

Catalog Number **MSQC9**
Storage Temperature -20°C

Product Description

SILu™ MAb Infliximab 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, SILu MAb Infliximab is designed to be used as an internal standard for analysis of Infliximab in human serum.^{1,2}

Each vial of SILu MAb Infliximab 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

SILu MAb Infliximab Heavy Chain:

EVKLEESGGGLVQPGGSMKLSCVASGFIFSNHWMNWVRQSP
EKGLEWVAEIRSKSINSATHYAESVKGRFTISRDDSKSAVY
LQMTDLRTEDTGVYYCSRNYGYSTYDYWGQGTTLTVSSAST
KGPSVFPLAPSSKSTSGGTAAALGCLVKDYFPEPVTVSWNSG
ALTSVHTFPAVLQSSGLYSLSSVTVPSSTLGTQTYICNV
NHKPSNTKVDKKVEPKSCDKHTCTCPPAPELLGGPSVFLF
PPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV
HNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSN
KALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLT
CLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLY
SKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPG

SILu MAb Infliximab Light Chain:

DILLTQSPAILSVSPGERVSFSCRASQFVGSSIHWHYQQRTN
GSPRLLIKYASESMGIPSRFSGSGSGTDFTLSINTVESED
IADYYCQQSHSWPFTFGSGTNLEVKRTVAAPSVFIFPPSDE
QLKSGTASVCLLNNFYPREAKVQWKVDNALQSGNSQESVT
EQDSKDSSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPV
TKSFNRGEC

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

SILu MAb Infliximab recovery is maximized when 0.1% formic acid is used for reconstitution of the lyophilized product.

Reconstitution with other solvents may reduce recovery. Do not freeze after reconstitution.

1. Briefly centrifuge the vial at $\sim 10,000 \times g$ to collect the product at the bottom of the vial.
2. Add 500 μL of ultrapure water containing 0.1% formic acid 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°C .

References

1. Peng, X. *et al.*, Development and Validation of LC-MS/MS Method for the Quantitation of Infliximab in Human Serum. *Chromatographia*, **78**(7-8), 521–531 (2015).
2. Willrich, M.A.V. *et al.*, Quantitation of infliximab using clonotypic peptides and selective reaction monitoring by LC-MS/MS. *International Immunopharmacology*, **28**(1), 513–520 (2015).

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

Table 1.

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

Universal Peptide Sequence	Location	Literature Reference
DILLTQSPAILSVPGER	Light Chain	1
YASEMSGIPSR	Light Chain	2
SINSATHYAESVK	Heavy Chain	1
GLEWVAEIR	Heavy Chain	2