

Product Information

SILu™MAb Vedolizumab - Stable Isotope Labeled Monoclonal Antibody Standard
recombinant, expressed in CHO cells

Catalog Number **MSQC29**
Storage Temperature $-20\text{ }^{\circ}\text{C}$

Product Description

SILu™MAb Vedolizumab 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 Vedolizumab is designed to be used as an internal standard for analysis of Vedolizumab 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.

Each vial of SILu™MAb Vedolizumab contains 100 μg of 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 Vedolizumab Heavy Chain:

QVQLVQSGAEVVKKPGASVKVSCCKGSGYTF~~TSYWMHWVRQAP~~
GQR**LEWIGEIDPSESNTNYNQK**FKGRVTLTVDISASTAYME
LSSLRSEDTAVYYCARGGYDGWDYAIDYWGQGTLVTVSSAS
TKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNS
GALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICN
VNHKPSNTKVDKKEPKSCDKTHTCPPCPAPELAGAPSVFL
FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVE
VHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKV
NKALPAPIEKTIISKAKQPREPQVYTLPPSRDELTKNQVSL
TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFL
YSKLTVDKSRWQQGNVFCSSVMHEALHNHYTQKSLSLSPG

Table 1.

Vedolizumab-specific peptide sequences liberated from SILu™MAb Vedolizumab by tryptic digest

Unique Peptide Sequence	Location
LEWIGEIDPSESNTNYNQK	Heavy chain
SSQSLAK	Light chain

SILu™MAb Vedolizumab Light Chain:

DVVMTQSP~~LSLPVTPGEPASISCR~~**SSQSLAK**SYGNTYLSWY
LQKPGQSPQLLIYGISNRFSGVPDRFSGSGSGTDFTLKISR
VEAEDVGVYYCLQGTHQPYTFGQGTKVEIKRTVAAPSVFIF
PPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNS
QESVTEQDSKSTYLSSTLTLSKADYEEKHKVYACEVTHQG
LSSPVTKSFNRGEC

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 Vedolizumab 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 $10,000 \times g$ 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 $-20\text{ }^{\circ}\text{C}$.

Legal Information

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