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Product Information

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

Catalog Number **MSQC21**
Storage Temperature –20 °C

Product Description

SILu™MAb Bevacizumab is a recombinant, stable isotope-labeled, monoclonal antibody which incorporates [$^{13}C_6$, $^{15}N_4$]-Arginine and [$^{13}C_6$, $^{15}N_2$]-Lysine. Expressed in CHO cells, SILu™MAb Bevacizumab is designed to be used as an internal standard for analysis of Bevacizumab 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 Bevacizumab 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 Bevacizumab Heavy Chain:

EVQLVESGGGLVQPGGSLRLSCAASGYTFTNYGMNWVRQAP
GKGLEWVGWINTYTGEPTYAADFKRR**FTFSLDTSK**STAYLQ
MNSLRAEDTAVYYCAKYPHYYGSSHWYFDVWGQGTLVTVSS
ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSW
NSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYI
CNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSV
FLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDG
VEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCK
VSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQV
SLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSF
FLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSP
G

SILu™MAb Bevacizumab Light Chain:

DIQMTQSPSSLSASVGDRVTITCSASQDISNYLNWYQQKPG
KAPKVLIYFTSSLHSGVPSRFSGSGSGTDFTLTISSLQPED
FATYYCQQYSTVPWTFGQGTKVEIKRTVAAPSVFIFPPSDE
QLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVT
EQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPV
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 Bevacizumab 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 × *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.

Table 1.
Bevacizumab-specific peptide sequences liberated from SILu™MAb Bevacizumab by tryptic digest

Unique Peptide Sequence	Location
FTFSLDTSK[1]	Heavy chain

Reference

1. Iwamoto, N., et al., Fully validated LCMS bioanalysis of Bevacizumab in human plasma using nano-surface and molecular-orientation limited (nSMOL) proteolysis. Drug Metabolism and Pharmacokinetics, **31(1)**, 46–50 (2016).

Legal Information

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