



Product name RITUXIMAB
Labelled standard



Catalog number RIX08221

Product description

Labelled Rituximab is a recombinant, stable isotope labelled, chimeric murine/human monoclonal antibody designed for use as an internal standard for quantitative analysis of Rituximab in plasma samples. Rituximab targets the CD20 protein and is used for the treatment of certain autoimmune diseases and types of cancer.

Similar products: Labelled Infliximab, Labelled Adalimumab, Labelled Etanercept

mAb sequence

Heavy chain

QVQLQQPGAELVKPGASVKMSCKASGYTFTSYNMHWVKQTPGRGLEWIGAIYPGNGDTSYNQKFKGKATLTADKSSSTAYMQLSSLTSED SAVYYCARSTYYGGDWYFNVWGAGTTVTVSAASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSS GLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKKAEPKSCDKHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDP EVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKISKAKGQPREPQVYTLPPSRDELTKNQV SLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKLSLSLSPGK

Light Chain

QIVLSQSPAILSASPGEKVTMTCRASSSVSYIHWFFQKPGSSPKPWYATSNLASGVPVRFSGSGSGTSYSLTISRVEAEDAATYYCQQWTSN PPTFGGGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTLTKADYEK HKVYACEVTHQGLSSPVTKSFNRGEC

Product features and protocols

Key features

- 1** Purity >95%
as determined by SDS-PAGE
- 2** Labelling Arg-¹³C₆, ¹⁵N₄ | Lys-¹³C₆, ¹⁵N₂
- 3** Isotopic incorporation >99%
as determined by LC-MS/MS analysis of digested SIL-mAb

Other features

Expression System	Mammalian cells
Protein content	Quantitation is carried out by UV Absorbance at 280 nm
Formulation	Lyophilized from buffer: 25 mM Sodium citrate pH6.5; 150 mM NaCl; 2% Trehalose; 0.065% Polysorbate 80.

Product preparation

For product preparation we recommend the following steps:

- Briefly centrifuge the tube before opening
- Reconstitute by adding the appropriate volume of ultrapure water for a final concentration of 200 µg/mL (e.g. 50 µl for 10 µg or 250 µl for 50 µg)
- Vortex gently to insure complete dissolution
- Wait 15 minutes at room temperature before proceeding further
- Vortex gently again and centrifuge briefly

Product storage

The product is lyophilized and shipped at ambient temperature. **Store at -80 °C upon receipt.**

After reconstitution, the protein can be preserved at 4°C for a few weeks.

Avoid multiple freeze-thaw cycles

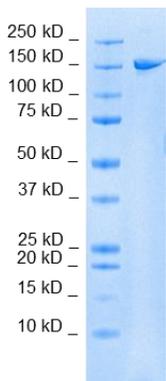
How to use our product



SIL mAbs are used as an internal standards by addition at the start of a sample preparation workflow. Both Labeled and target therapeutic mAbs will be processed throughout the entire analytical procedure controlling for variability caused by pre-analytical treatments or incomplete enzymatic digestion (1).



Supporting information



SDS-PAGE gel analysis of RITUXIMAB protein in non-reducing/ non heated conditions (NR/NH)
Stained with Coomassie blue

References

1. **D. Lebert, G.Picard, et al.** Absolute and multiplex quantification of antibodies in serum using PSAQ™ standards and LC-MS/MS, *Bioanalysis*. 2015, 7, 1237-51.



The product is intended for research use only. Not for diagnostic or therapeutic use.

Legal

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