



Product name CETUXIMAB
Labelled standard



Catalog number ERX08221

Product description

Labelled Cetuximab is a recombinant, stable isotope labelled, chimeric monoclonal antibody that is designed to be used as an internal standard for quantitative analysis of Cetuximab in plasma and tumour samples. Cetuximab is an epidermal growth factor receptor inhibitor for treatment of head and neck cancer, and colorectal cancer.

Similar products: Labelled Trastuzumab, Labelled Bevacuzimab, Labelled Rituximab

mAb sequence

Heavy chain

QVQLKQSGPGLVQPSSLSITCTVSGFSLTNYGVHWVRQSPGKGLEWLGVIWSGGNTDYNTPTFSRLSINKDNSKSQVFFKMNSLQSNLT
AIYYCARALTYDYEFAYWGQGLTVLSAASKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPTVSWNSGALTSGVHTFPAVLQSSGLYSL
SSVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFN
WYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKKVSNAKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCL
VKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK

Light Chain

DILLTQSPVILSVSPGERVSFSCRASQSIGTNIHWYQQRRTNGSPRLLIKYASESISGIPSRFSGSGSGTDFTLSINSVESEDIADYYCQ
QNNNWPTTFGAGTKLELKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDS
TYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

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: 5 mM Histidine pH6; 2% Trehalose; 0.01% Polysorbate 20.

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.**

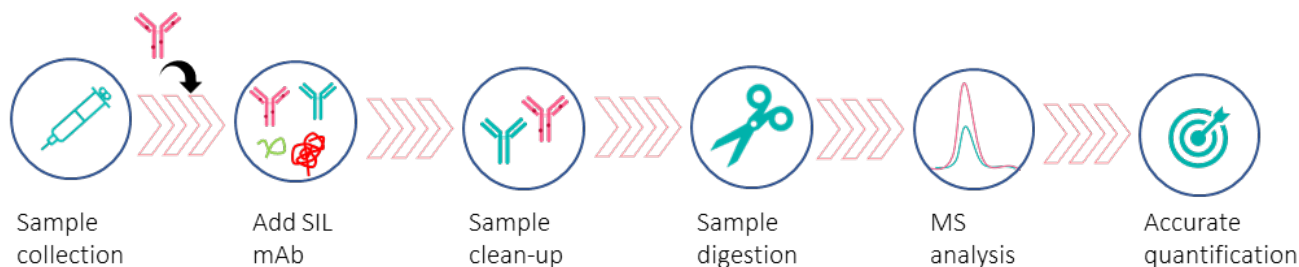
After reconstitution, the protein can be preserved at 4°C for a few weeks.

Avoid multiple freeze-thaw cycles

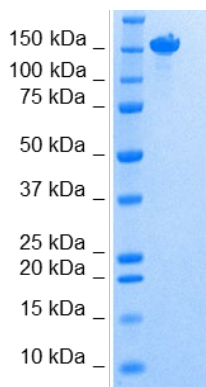
How to use our product



SIL mAbs are used as an internal standards by addition at the start of a sample preparation workflow. Both Labelled 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 CETUXIMAB 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.
2. **Millet, A. Guittou, J.** Determination of Cetuximab in Plasma by Liquid Chromatography–High-Resolution Mass Spectrometry Orbitrap With a Stable Labeled ¹³C,¹⁵N-Cetuximab Internal Standard. *Therapeutic Drug Monitoring*. 2019, 467–475.



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

Legal

This product is licensed under U.S. Patent No. 7,396,688 and foreign counterparts from E. I. du Pont de Nemours and Company. The purchase of this product conveys to the buyer the nontransferable right to use the purchased amount of the product for research and development only. Information about licenses for other uses is available from: E. I. du Pont de Nemours and Company; Attn: Associate Director, Commercial Development; DuPont Experimental Station E268; 200 Powdermill Rd.; Wilmington, DE 19803; 1-877-881-9787 (voice), 1-302-695-1437 (fax), licensing@dupont.com.