Technical Data Sheet

InVivoMAb anti-mouse CD3E F(ab')₂ fragment



Lot Specific Information

Lot Number:Lot Specific*Volume:Lot Specific*

Concentration: Lot Specific* (generally 4 to 11 mg/ml) *

Total Protein: Lot Specific*

*This information will be noted on the certificate of analysis that ships with this product.

Product Information

Immunogen:

Endotoxin:

Purity:

Sterility:

RRID:

Production:

Purification:

Catalog Number: BE0001-1FAB
Clone: 145-2C11 f(ab')2 Fragments

Isotype: Armenian Hamster IgG1

Recommended Isotype Control(s): InVivoMAb hamster IgG f(ab')2 fragments **Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer

Mouse BM10-37 cytotoxic T cells

Reported Applications: in vivo T cell depletion

Formulation: PBS, pH 7.0

Contains no stabilizers or preservatives

<2EU/mg (<0.002EU/μg)

Determined by LAL gel clotting assay

>95%

Determined by SDS-PAGE

0.2 µM filtered Pepsin Digest Protein A AB_2687679

Molecular Weight:

Description

The anti-mouse CD3 F(ab')2 fragment is the antigen binding F(ab')2 fragments of the 145-2C11 monoclonal antibody only. The majority of the Fc fragment has been removed via pepsin digestion. The 145-2C11 antibody F(ab')2 fragment reacts with mouse CD3ε, a 20 kDa transmembrane cell-surface protein that belongs to the immunoglobulin superfamily. CD3ε is one of five polypeptide chains that combine to form the TCR complex. CD3ε is expressed on T lymphocytes, NK-T cells, and to varying degrees on developing thymocytes. CD3 plays roles in TCR signaling, T lymphocyte activation, and antigen recognition. The complete 145-2C11 antibody is commonly used to stimulate T cells *in vitro* however, when used *in vivo* activation of resting T cells results in cytokine release and toxicity caused by Ab-mediated cross-linking of T cells and Fcγ receptor-bearing cells. To avoid these complications non-Fc receptor binding F(ab')2 fragments of the 145-2C11 antibody are commonly used. This non-FcR-binding anti-CD3 induces apoptosis of Ag-activated T cells *in vivo* by allowing durable expression of the TCR and sustained signaling. Foxp3⁺ Tregs have been shown to be resistant to CD3 antibody-mediated depletion.

Shelf-life and Storage

Store at the stock concentration at 4°C. Do not freeze.

All Bio X Cell antibodies have a guaranteed shelf-life of one year from the date of customer receipt when stored as recommended. It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at bxcell.com/fags.

Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bxcell.com/product/m-cd3e-fab2-fragments/#references or scan the QR code below.

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