Bulk Anti-Human CD3 (UCHT-1) Antibody

Product Code: ICH1002

Bulk anti-human CD3 antibody (UCHT-1)

Product Specific Citations:

Gambles, MT et al. Two-component T-cell immunotherapy enables antigen pre-targeting to reduce cytokine release without forfeiting efficacy, Nanomedicine: Nanotechnology, Biology and Medicine, Volume 67, 2025 **Bio X Cell:**

ICH1002 is up to 37% cheaper for industry customers than the equivalent product BE0231 from Bio X Cell. **Product Benefits:**

ichorbio's anti-human CD3 antibody (UCHT-1) is manufactured in a cGMP compliant, ISO Quality Standard 9001:2015 facility. ichorbio's low endotoxin antibodies have half the endotoxin of comparable antibodies from Bio X Cell at less than 1.0 EU/mg. If ichorbio's low endotoxin antibodies are not low enough we also offer ultra low endotoxin antibodies which have even less endotoxin (<0.5EU/mg) at an even higher purity (98% versus 95%). ichorbio: the best antibodies for *in vivo* research.

Target:

CD3

Clone:

UCHT-1

Size:

ichorbio's UCHT-1 *in vivo* antibody is available in the following bulk sizes: 1mg, 5mg, 25mg, 50mg and 100mg ichorbio regularly manufactures multi-gram amounts of our anti-CD3 UCHT-1 clone - please contact us for pricing.

Isotype:

Mouse IgG1

Other Names:

CD3 epsilon chain, CD3E, T-cell surface antigen T3/Leu-4 epsilon chain

Uniprot:

P07766

Host:

Mouse

Species Reactivity:

Human

Specificity:

Anti-human CD3 antibody (UCHT-1) recognizes Human CD3. anti-Human CD3 recognizes a (Mr 22-28 kDa) T-cell surface glycoprotein. The epitope recognized by the CD3 antibody is expressed on a constant region of the epsilon chain of the CD3 antigen/T-cell receptor complex (TCR)

Purification Method:

This monoclonal antibody was purified using multi-step affinity chromatography methods such as Protein A or G depending on the species and isotype.

Antigen Distribution:

The CD3 antigen is expressed on approximately 60-80% of human peripheral blood lymphocytes, 20-40% of splenic lymphocytes, the majority of T-CLL and approximately 70% of T-ALL Cells.

Background:

Anti-CD3 may be used for enumerating immunocompetent T-lymphocytes in peripheral blood. Clone UCHT-1 is also useful in histology for localization of T-lymphocytes in tissue and may be used to enrich T-cells by cell sorting. This T-cell marker has also been used to

determine T-versus B-cell lymphomas and leukemias. The UCHT-1 clone is recognized in the human leukocyte differentiation antigen workshop III 471.

Immunogen:

Unknown

Concentration:

≥ 2.0 mg/ml

Formulation:

0.01 M phosphate buffered saline (PBS) pH 7.2, 150 mM NaCl with no carrier protein, potassium or preservatives added. BSA and Azide free.

Purity:

>95% by SDS-PAGE and HPLC

>98% by SDS-PAGE and HPLC

Endotoxin:

<1.0 EU/mg as determined by the LAL method

≤ 0.75 EU/mg as determined by the LAL method

Aggregation:

Aggregation level ≤ 5%

Aggregation level ≤ 1%

Storage:

anti-human CD3 antibody (UCHT-1) is stable for at least one week when stored sterile at 2-8°C. For long term storage aseptically aliquot in working volumes without diluting and store at –80°C. Avoid Repeated Freeze Thaw Cycles.

Applications:

Flow Cytometry, Immunoprecipitation, Western Blot, IHC (Frozen), CyTOF, Functional Assays

Application Notes:

Flow Cytometry: It is recommended to use the indirect method for signal enhancement when enumerating cells expressing CD3. A suggested method would be to stain cells expressing CD3 with 2.0 µg per million cells in a total staining volume of 100 µl followed by Goat Anti-Mouse IgG (H&L)-R-phycoerythrin. Each investigator should determine their own optimal working dilution for specific applications.

Use:

Products are for research use only.

Isotype Control:

Mouse IgG1 Isotype Control for In Vivo - Low Endotoxin [HKSP] (ICH2247)