Anti-Human CD3 mAb (GMP Grade)

Please read the manual carefully before use.

Cat. No. HM101

Version No. Version 1.0

Storage: at 2-8 ℃ for two years.

Description

The CD3 molecule binds to the T-cell receptor (TCR) to form the CD3/TCR complex, which is involved in antigen recognition, signal transduction, and T cell activation[1]. CD3 monoclonal antibody specifically recognizes the CD3ε chain in the CD3/TCR complex, enabling T cell activation. It is the most widespread method for T cell activation and expansion *in vitro* that using co-stimulation with CD3 and CD28 monoclonal antibodies to mimic dual-signal T cell activation *in vivo*[2][3]. Mononuclear cells isolated from peripheral blood, bone marrow or umbilical cord blood can be cultured for a period of time in the presence of CD3 mAb, CD28 mAb and a variety of cytokines to obtain a large number of proliferating T cells.

This product is produced by monoclonal cell lines, highly purified, and supplied in phosphate buffered saline (PBS, pH 7.4). It is xeno-free and can be used for CAR-T or TCR-T cell preparation.

Product Information

Specificity: Human

Expressed host: HEK-293 cells

Subtype: Mouse IgG2a, κ

Purity: > 95% by SEC-HPLC and SDS-PAGE gel analyses

Endotoxin: < 0.1 EU/μg

Kit Content

Component	HM101-01
Anti-Human CD3 mAb (GMP Grade)	500 μg/500 μl

Usage Guide

The unopened antibody is stable for two years at 2-8℃.

If opened, it is recommended to aliquot the antibody into smaller quantities. Store at -20℃ for two years. Avoid repeated freeze-thaw cycles.

Antibody soluble method: Working concentration is 0.1~2 μg/ml (recommended usage is 0.2 μg/ml), and the specific usage needs to be determined by pre-experiment.

Antibody coating method: Dilute it to 0.5~5 μg/ml with phosphate buffered saline (PBS, pH 7.4) (recommended usage is 1 μg/ml). Incubate overnight at 2-8℃. The specific usage needs to be determined by pre-experiment.

References

[1]. Kuhns MS, Davis MM, Garcia KC: Deconstructing the Form and Function of the TCR/CD3 Complex. Immunity 2006, 24 (2):133-139.

[2]. Wang X, Rivière I: Clinical manufacturing of CAR T cells: foundation of a promising therapy. Molecular Therapy - Oncoly tics 2016, 3:16015.

[3]. Richards RM, Sotillo E, Majzner RG: CAR T Cell Therapy for Neuroblastoma. Frontiers in Immunology 2018, 9.

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