Anti-Human CD3 mAb

Size / Cat.No.: 500μg / GMP-TL101-0500

1mg / GMP-TL101-1000(Customized)

5mg / GMP-TL101-5000(Customized)

Product Name	
Generic Name	Anti-Human CD3 mAb

Product Information	
Expression Host	CHO cells
QC Testing Purity	> 95 % as determined by SDS-PAGE.
Purification	Protein A purified from cell culture supernatant.
Endotoxin	< 0.01EU per μg of the protein as determined by the LAL method.
Biological activity	The binding rate with Jurkat cells shall not be less than 90%.
Formulation	Supplied as a 0.22μm filtered solution in PBS, PH 7.4.
Stability & Storage	24 months at 2℃ to 8℃. Avoid repeated freeze-thaw cycles.
Applications	**Soluble method**: the concentration of 500 ng/mL is recommended, under which T cells can be activated and $CD3^+CD56^+$ T cells can be expanded significantly. **Coating method:** 10 mL PBS buffer (5μg/mL anti-human CD3) is placed in a T75 flask at 4°C overnight. Please remove the PBS and wash the flask with saline gently three times before use.

Background

In immunology, CD3 (Differentiated Cluster 3) of T cells is a protein complex. CD3 has five peptide chains, namely, the γ, δ, ε, ζ, and η chains, all of which are transmembrane proteins. The transmembrane region of the CD3 molecule is connected to the transmembrane region of the two peptide chains of TCR through a salt bridge to form the TCR-CD3 complex, which jointly participates in the recognition of antigen. The activation signal generated by TCR antigen recognition is generated and transduced by CD3. Mononuclear cells isolated from peripheral blood, bone marrow, or umbilical cord blood can obtain large numbers of proliferating T lymphocytes in the presence of CD3 monoclonal antibodies and various cytokines.

References

1. Silvia M Bacot,Taylor A Harper,Rebecca L Matthews,Christie Jane Fennell,Adovi Akue, Mark A KuKuruga , Shiowjen Lee,Tao Wang,Gerald M Feldman.Exploring the Potential Use of a PBMC-Based Functional Assay to Identify Predictive Biomarkers for Anti-PD-1 Immunotherapy. Int J Mol Sci. 2020 Nov 27;21(23):9023.

2. Min Zhou, Jing Wang, Cui-Ping Li , Jing-Yan Xu,Bing Chen,Autologous Cytokine-Induced Killer Cell Immunotherapy for Patients with High-Risk Diffuse Large B Cell Lymphoma After the First Complete Remission. Onco Targets Ther. 2020 Jun 22;13:5879-5885.