

Anti-Human CD28 mAb

Size / Cat.No.: 500µg / GMP-TL102-0500

Product Name

Generic Name Anti-Human CD28 mAb

Product Information

Expression Host Mouse Hybridoma 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°C to 8°C.
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

The CD28 molecules express on the surface of most T cells and is considered to be unique to T cells. T cell reactivity to antigen is mainly mediated through the CD3 / TCR complex, but also depends on the synergy of other molecules. T cells can be efficiently activated by several pathways, including CD3 / TCR, CD2, and CD28. Mononuclear cells isolated from peripheral blood, bone marrow or cord blood can be the source of T cells proliferation in the presence of CD3, CD28 monoclonal antibodies and various other cytokines.

References

1. Daniel Teschner , Gregor Wenzel , Eva Distler , Elke Schnürer , Matthias Theobald , AxlA Neurauter , Karoline Schjetne and Wolfgang Herr. In vitro stimulation and expansion of human tumor-reactive CD8+cytotoxic T-lymphocytes by anti-CD3/CD28/CD137 magnetic beads .Scandinavian Journal of Immunology 2011,74(2):155–164.
2. D Sangiolo, G Mesiano, F Carnevale-Schianca, W Piacibello, M Aglietta & A Cignetti . Cytokine induced killer cells as adoptive immunotherapy strategy to augment graft versus tumor after hematopoietic cell transplantation. Expert Opin. Biol. Ther. (2009) 9(7):831-840.
3. RENATE SIEFKEN, ROLAND KURRLE, AND REINHARD SCHWINZER.CD28-Mediated Activation of Resting Human T Cells without Costimulation of the CD3/TCR Complex. CELLULAR IMMUNOLOGY 176, 59–65 (1997)

Product Use

For research and manufacturing use