

Recombinant anti-Human CD28 mAb(Cat.No.:GMP-A063)

Source: Human Cells

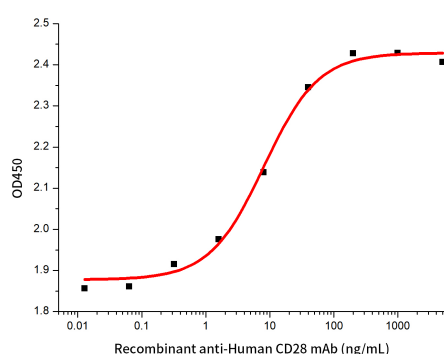
Description: CD28 molecule is present on the surface of most T cells and is considered a surface molecule unique to T cells. However, not only the first signal of the T lymphocyte receptor (TCR)/CD3 complex is required during the full activation of T lymphocytes, but also the second signal, to enhance the activation and proliferation of T lymphocytes. The synergistic stimulation molecule CD28 is present on the surface of T lymphocytes, and its interaction with its ligand B7 is one of the major pathways to provide the second signal for T lymphocyte activation. T lymphocytes will be fully activated if the second signal is provided through the synergistic stimulation of the CD28 antibody while providing the first signal using the simulation of the CD3 antibody in vitro.

Recombinant Anti-Human CD28 mAb is expressed by mammalian cells, and is produced with raw materials of pharmaceutical applicable level. The host protein residue, nucleic acid residue and common pathogens are strictly controlled, and the production and quality management procedures of the product comply with GMP regulations to ensure the traceability of the production process and all raw materials.

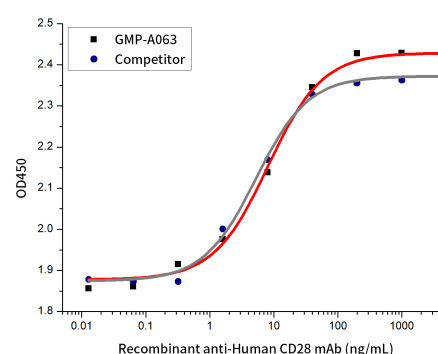
Shipping: This product is a liquid formulation and should be preserved in dry ice during shipment.

Storage: Storage at -20±5°C, expiration date labeled on bottle.

Bioactivity-Cell Based Assay:



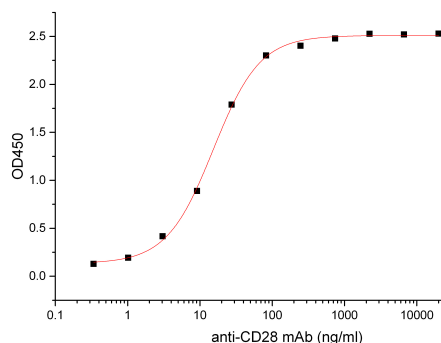
Measured by its ability to induce IL-2 secretion by Jurkat cells. The ED50 for this effect is ≤ 100 ng/mL in the presence of 20 ng/mL Recombinant anti-Human CD3 mAb (QC varified).



Measured by its ability to induce IL-2 secretion by Jurkat cells in the presence of 20 ng/mL Recombinant anti-Human CD3 mAb.

Bioactivity-ELISA:

Version26.2.1



Immobilized Human/Cynomolgus CD28-His(Cat#C406) at 2 μ g/ml (100 μ l/well) can bind Anti-CD28 mAb(Cat#GMP-A063) The ED50 of Anti-CD28 mAb(Cat#GMP-A063) is 15.3 ng/ml. (Regularly tested)

Recommendations:

- (1) Make sure the product properly stored and none expired before using.
- (2) Sterile condition without pyrogen is required for reconstitution, re-aliquoting, dilution.
- (3) After reconstitution, aliquoted solution vials should be stored at -70°C and minimize freeze-thaw cycles preventing denaturation of protein.

Applications in T cell activation and expansion:

General applications: The recommended concentration is 5–10 μ g/mL; if necessary, the optimal concentration for specific cells can be selected at 5–20 μ g/mL. Coating of culture flask:

- a. Calculate the volume on the basis of 150 μ L/cm², dilute the Recombinant Anti-Human CD3 mAb, recombinant anti-CD28 mAb, and NovoNectin® GMP Grade with normal saline to 5–10 μ g/mL, 5–10 μ g/mL, and 25–50 μ g/mL, respectively, and mix them to a coating solution;
- b. Add the diluted coating solution to a culture flask or bag and cover the bottom with the solution;
- c. Place the solution in a 37 °C incubator for 5–8 h, or at 2–5 °C overnight;
- d. Remove the liquid and wash the flask or bag 3 times with normal saline;
- e. The well-coated culture vessel shall be used immediately; if the vessel is to be used after more than 30 minutes, store it in normal saline.