For Research Use Only

Mouse CD3/CD28 T Cell Activation



Catalog Number: KMS311



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Description

T lymphocytes are activated through MHC class II molecules on antigen-presenting cells (APC). After activation, T cells expand rapidly and secrete various cytokines. The Mouse CD3/CD28 T Cell Activation Beads Kit is designed to activate and expand mouse T cells. This kit contains Biotinylated anti-mouse CD3 and CD28 antibodies, as well as cell culture grade Streptavidin magnetic beads. After Streptavidin magnetic beads are loaded with biotinylated CD3/CD28, they mimic antigen presenting cells and can activate resting T lymphocytes from mouse splenocytes or purified T lymphocytes. After 2-3 days of activation, magnetic beads can easily be removed by magnet. Further T lymphocytes expansion may require specific additives for in *vitro* culture.

Product Information

KMS311-10:

 \cdot MS311A-10: 200µL 0.5mg/mL functional grade Biotin-CD3 (clone: 145-2C11) \cdot MS311B-10: 200µL 0.5mg/mL functional grade Biotin-CD28 (clone: 37.51.1)

·MS311C-10: 500µL cell culture grade Streptavidin magnetic beads (2x10⁸ beads/mL)

KMS311-100:

· MS311A-100: 2000µL 0.5mg/mL functional grade Biotin-CD3 (clone: 145-2C11)
· MS311B-100: 2000µL 0.5mg/mL functional grade Biotin-CD28 (clone: 37.51.1)

· MS311C-100: 5000µL cell culture grade Streptavidin magnetic beads (2x10⁸beads/mL)

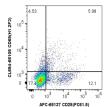
Package 10test/100test

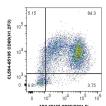
Storage 2-8°C
Reactivity Mouse
Beads diameter 2.7 µm

Recommend usage

20µL Biotin-CD3, 20µL Biotin-CD28 and 50µL Streptavidin magnetic beads; mix well and add 10µL buffer for incubation. 100µL antibody-loaded magnetic beads contains 1x10⁷ magnetic particles and is used to activate 1x10⁷ mouse splenocytes or purified mouse T lymphocytes in 2mL cell culture media (1:1 bead to cell ratio).

Validation Data





Representative example of BALB/c mouse splenocyte activation: 10'7 BALB/c mouse splenocytes in 2 ml cell culture media were activated by Mouse CD3/CD28 T cell Activation Beads Kit for 2 days at a 1.3:1 bead to cell ratio. Unstimulated cells (left panel) and stimulated cells (right panel) were stained with flow antibodies.... APC-CD25 and CL594-CD69. Total viable lymphocytes were gated.