

CD4 (SK3)

Type	Size	Catalog number
Unconjugated	100µg	112001
	500µg	112003
FITC	25 tests	112014
	100 tests	112015
	200 tests	112016
APC	25 tests	112044
	100 tests	112045
	200 tests	112046

Antigen:	CD4
Immunogen:	Human peripheral blood T cells
Host/Isotype:	Mouse, IgG1, k
Reactivity:	Human
Purity:	>90% pure tested via polyacrylamide gel electrophoresis (PAGE)
Formulation:	PBS, pH7.2, 0.09%NaN ₃ (unconjugated) PBS, pH7.2, 0.09% NaN ₃ and 0.2% (w/v) BSA (conjugated)
Storage:	Store at 2-8°C and protected from prolonged exposure to light. Do not freeze.
Applications:	Flow Cytometry

Application Information

Each lot of these antibodies has been pre-titrated and tested by flow cytometric analysis of human PBMCs such that 0.5µg (unconjugated, Biotin) or 5µl (conjugated) of these products are sufficient for staining 1 million cells in a 100µl staining volume or 100µl of whole blood. It is recommended to titrate antibody reactivity empirically for optimal performance.

Antigen Information

The clone SK3, a mouse monoclonal antibody selectively binds with a 55-59kD type I transmembrane glycoprotein and a member of the immunoglobulin superfamily. CD4 contains four extracellular Ig-like domains (D1- D4). The epitope for SK3 is located within the D3 domain of the protein, which has a structure resembling an Ig variable domain. Expression of CD4 is observed in subsets of T lymphocytes, monocytes, macrophages, and dendritic cells. Through interaction of MHC-II, CD4 facilitates cell-cell interaction, thymic differentiation, and activation of downstream signaling cascades. HIV infection of T-cells is instigated through binding of HIV to CD4. Binding of SK3 antibody blocks HIV infection through CD4 and also blocks the mixed lymphocyte reaction (MLR).

References

1. Hernberg, MM, et al. 2004. *Melanoma Res.* 14:493.
2. Linder, J, et al. 1987. *Am J Pathol.* 127:1.
3. Reinherz, E.L, et al. 1979. *Proc Natl Acad Sci USA.* 76:4061.
4. Toda, T, et al. 2012. *Immunobiology.* 217:864.
5. Bour, S et al. 1995. *Microbiol. Rev.* 59:63-93.

Terms and Conditions

This product is for research use only (RUO) and not intended for diagnostic testing.