Caprico Biotechnologies

TECHNICAL DATA SHEET

CD4 (SK3)

Analyte Specific Reagent (ASR)*

Type	Number of tests	Volume per test (µL)	Total volume (µL)	Catalog number
FITC	50	5	250	4120012
	100	5	500	4120015
PE	50	5	250	4120022
	100	5	500	4120025
APC	50	5	250	4120042
	100	5	500	4120045
PerCP	50	5	250	4120032
	100	5	500	4120035
PerCP-Cyanine5.5	50	5	250	4120062
	100	5	500	4120065
PE-Cyanine5	50	5	250	4120072
	100	5	500	4120075
APC-Cyanine7	50	5	250	4120092
	100	5	500	4120095
PE-Cyanine7	50	5	250	4120082
	100	5	500	4120085
APC-iFluor™ 700	50	5	250	4120172
	100	5	500	4120175
iFluor™ 488	50	5	250	4120112
	100	5	500	4120115

Antigen: CD4
Immunogen: Human Peripheral Blood T Cells
Host/Isotype: Mouse, IgG1,κ
Reactivity: Human
Purity: >90% pure tested via polyacrylamide gel electrophoresis (PAGE)
Formulation: PBS, pH7.2, 0.09% NaN_3 and 0.2% (w/v) BSA
Storage: Store at 2-8°C and protected from prolonged exposure to light. **Do not freeze.**
Applications: Flow Cytometry.

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.*

*****Analyte Specific Reagent. The analytical and performance characteristics of this ASR product are not established.

Caprico Biotechnologies, 400 Pinnacle Way, Suite 430, Norcross, GA 30071
Phone: +1 (678) 691-2143 Technical Support Ext 102, Fax: (678) 691-2223
Email: techsupport@capricobio.com
www.CapricoBio.com