cFluor[®] Technical Data Sheet

cFluor® R720 Anti-Human CD4 (SK3)

PRODUCT DETAILS	
Catalog Number:	R7-20045 (100 tests)
	R7-20046 (25 tests)
Reactivity:	Human
Clone:	SK3
Format:	cFluor® R720*
Isotype:	Mouse IgG1, κ
Volume Per Test:	5 μL / test
Application:	Flow cytometry
Formulation:	Phosphate-buffered saline, pH 7.2, containing 0.09% sodium azide and 0.2%
	BSA (BSA Country of Origin USA)
Storage:	2-8°C and protected from light.
	Do not freeze

PRODUCT DESCRIPTION

The SK3 monoclonal antibody binds to human CD4, a 59-kDa type I transmembrane glycoprotein in the immunoglobulin superfamily. The CD4 molecule is expressed predominantly on thymocytes and a subpopulation of mature T-helper lymphocytes. It is also present on monocytes at low levels^{1,2}. CD4 plays a role in cell-cell interaction by acting as a co-receptor for MHC class II in antigen recognition. CD4 also has been shown to bind glycoprotein 120 on external envelope of HIV³. The antibody was conjugated to a fluorophore and purified by affinity chromatography.

RECOMMENDED USAGE

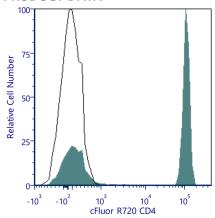
Each lot of this antibody is quality control tested using flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 μ L per 1 million cells in a staining volume of 100 μ L. If whole blood is analyzed, then use 5 μ L per 100 μ L. It is recommended that users titrate the antibody to obtain the optimal result for their specific application.

Please briefly centrifuge the reagent vial before use.

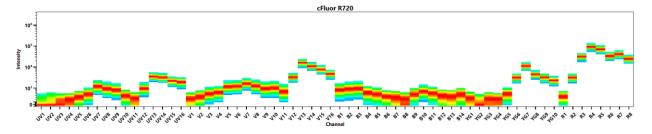
Use appropriate personal protective equipment per the product safety data sheet when using this product.

cFluor[®] Technical Data Sheet

PRODUCT DATA



Human peripheral blood was stained with cFluor® R720 Anti-Human CD4 (clone SK3) (filled histogram) or cFluor® R720 mouse IgG1, κ isotype control (open histogram). Data shown is gated on lymphocytes.



Spectral signature of cFluor® R720 from a Cytek® Aurora 5 laser system equipped with 355, 405, 488, 561 and 640 nm lasers using CytekAssaySetting.

REFERENCES

- 1. Evans RL, et al. 1981. Immunol. 78:544
- 2. Muench M, et al. 1997. Blood 89:1364
- 3. Arno A et al. 1999. J. Infect. Dis. 180:56

*cFluor® R720 is equivalent to CF® 700 manufactured and provided by Biotium, Inc. under an Agreement between Biotium and Cytek (LICENSEE). The manufacture, use, sale, offer for sale, or import of the product is covered by one or more of the patents or pending applications owned or licensed by Biotium. The purchase of this product includes a limited, non-transferable immunity from suit under the foregoing patent claims for using only this amount of product for the purchaser's own internal research. No right under any other patent claim, no right to perform any patented method, and no right to perform commercial services of any kind, including without limitation reporting the results of purchaser's activities for a fee or other commercial consideration, is conveyed expressly, by implication, or by estoppel.

For Research Use Only. Not intended for use in diagnostic procedures.

R8-50045 Rev. B, Effective Date: 05/04/2022