

cFluor[®] B690 Anti-Human CD38 (HB7)

PRODUCT DETAILS	
Catalog Number:	R7-20299 (100 tests) R7-20300 (25 tests)
Reactivity:	Human
Clone:	HB7
Format:	cFluor [®] B690*
Isotype:	Mouse IgG1, κ
Test Dilution:	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 HB7 monoclonal antibody binds to human CD38, a 45-kDa type II single-chain transmembrane glycoprotein. CD38, also known as T10, is expressed in high levels on plasma cells, activated T cells and terminally differentiated B cells. CD38 has two functions: a receptor or an enzyme. As a receptor, CD38 binds CD31. As an ectoenzyme, CD38 functions both as ADP-ribosyl cyclase and cyclic ADP-ribose hydrolase to catalyze the synthesis of cyclic ADP-ribose to regulate intracellular calcium level, thus playing an essential role in cell signaling and growth⁽¹⁾⁽²⁾. The antibody was conjugated to a fluorophore and purified by chromatography.

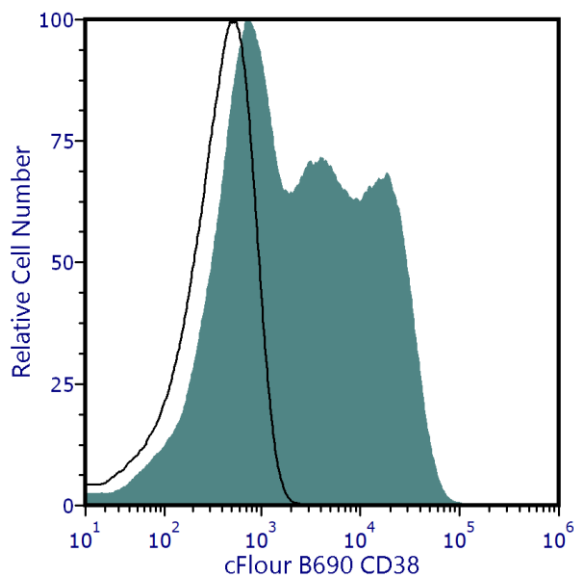
RECOMMENDED USAGE

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 μL per 1 million cells in a staining volume of 100 μL. If whole blood is analyzed, then use 5 μL per 100 μL. It is recommended that users titrate the antibody to obtain the optimal result for their specific application.

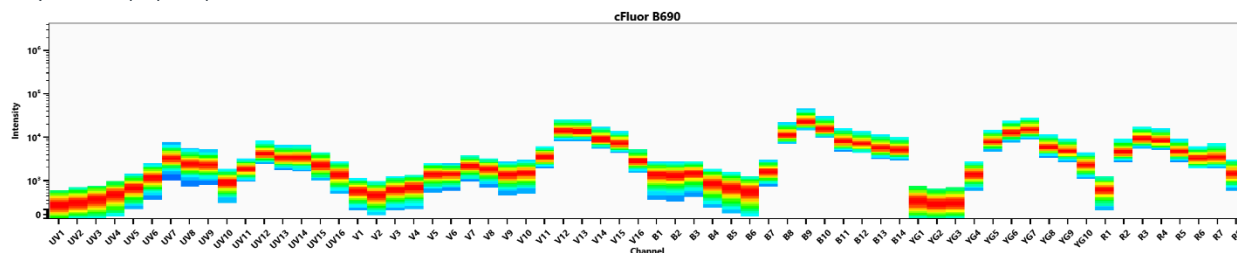
Please briefly centrifuge the reagent vial before use.

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

PRODUCT DATA



Human peripheral blood was stained with cFluor® B690 Anti-Human CD38 (clone HB-7) (filled histogram) or cFluor® B690 mouse IgG1, κ isotype control (open histogram). Data shown is gated on lymphocytes.



Spectral signature of cFluor® B690 from a Cytex® Aurora 5 laser system equipped with 355, 405, 488, 561 and 640 nm lasers using CytexAssaySetting.

REFERENCES

1. Lee, Hon Cheung. 2006. Molecular medicine. 317-23
2. Deng QW, et al. 2019. J Biol Chem. 18;294(42):15293-15303

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

*cFluor® B690 is a tandem dye made with PerCP. Caution – Tandem dyes may show changes in their emission spectra with prolonged exposure to light or fixatives.