# **Technical Data Sheet**

# PE-CF594 Mouse Anti-Human CD15

#### **Product Information**

Material Number: 562372

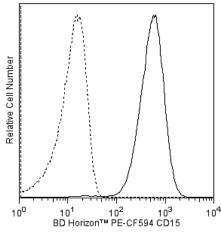
Alternate Name: 3-fucosyl-N-acetyllactosamine; 3-FAL

Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

#### Description

The W6D3 monoclonal antibody specifically binds to 3-fucosyl-N-acetyllactosamine (3-FAL), a 220 kDa carbohydrate structure, also called X-hapten. 3-FAL is expressed on >95% of granulocytes, including neutrophils and eosinophils, and on monocytes to a varying degree, but not on lymphocytes or basophils. CD15 plays a role in mediating phagocytosis, bactericidal activity and chemotaxis. Most CD15 antibodies are IgM isotype; clone W6D3 is a mouse IgG1 isotype. In comparison studies with clone HI98, a known CD15 antibody, clone W6D3 shows brighter fluorescence staining and its binding can be blocked by clone HI98.

This antibody is conjugated to BD Horizon<sup>TM</sup> PE-CF594, which has been developed exclusively by BD Biosciences as a better alternative to PE-Texas Red®. PE-CF594 excites and emits at similar wavelengths to PE-Texas Red® yet exhibits improved brightness and spectral characteristics. Due to PE having maximal absorption peaks at 496 nm and 564 nm, PE-CF594 can be excited by the blue (488-nm), green (532-nm) and yellow-green (561-nm) lasers and can be detected with the same filter set as PE-Texas Red® (eg 610/20-nm filter).



Flow cytometric analysis of CD15 expression on human peripheral blood granulocytes. Whole blood was stained with BD Horizon™ PE-CF594 Mouse Anti-Human CD15 antibody (Cat. No. 562372; solid line histogram) or with a BD Horizon™ PE-CF594 Mouse IgG1, κ Isotype Control (Cat. No. 562292; dotted line histogram). The erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable granulocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

### **Preparation and Storage**

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with BD Horizon™ PE-CF594 under optimum conditions, and unconjugated antibody and free PE-CF594 were removed.

# **Application Notes**

#### Application

Flow cytometry Routinely Tested
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## **Suggested Companion Products**

Catalog Number	Name	Size	Clone	
554656	Stain Buffer (FBS)	500 ml	(none)	
562292	PE-CF594 Mouse IgG1, κ Isotype Control	0.1 mg	X40	
555899	Lysing Buffer	100 ml	(none)	

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#### **Product Notices**

- This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10<sup>6</sup> cells in a 100-µl experimental sample (a test).
- 2. An isotype control should be used at the same concentration as the antibody of interest.
- 3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 4. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
- 7. Texas Red is a registered trademark of Molecular Probes, Inc., Eugene, OR.
- 8. CFTM is a trademark of Biotium, Inc.
- 9. When excited by the yellow-green (561-nm) laser, the fluorescence may be brighter than when excited by the blue (488-nm) laser.
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- Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using multi-laser cytometers, which
  may directly excite both PE and CFTM594.
- 12. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

#### References

Knapp W, Dorken B, Rieber EP, et al, ed. *Leucocyte Typing IV*. New York: Oxford University Press; 1989:1-1208. (Biology)
Lund-Johansen F, Olweus J, Horejsi V, et al. Activation of human phagocytes through carbohydrate antigens (CD15, sialyl-CD15, CDw17, and CDw65). *J Immunol*. 1992: 148(10):3221-3229. (Biology)

Zola H, Swart B, Nicholson I, Voss E. Leukocyte and Stromal Cell Molecules. The CD Markers. Hoboken, New Jersey: John Wiley & Sons, Inc.; 2007:1-581. (Biology)

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562372 Rev. 1 Page 2 of 2