Technical Data Sheet

BV605 Mouse Anti-Human IgG

Product Information

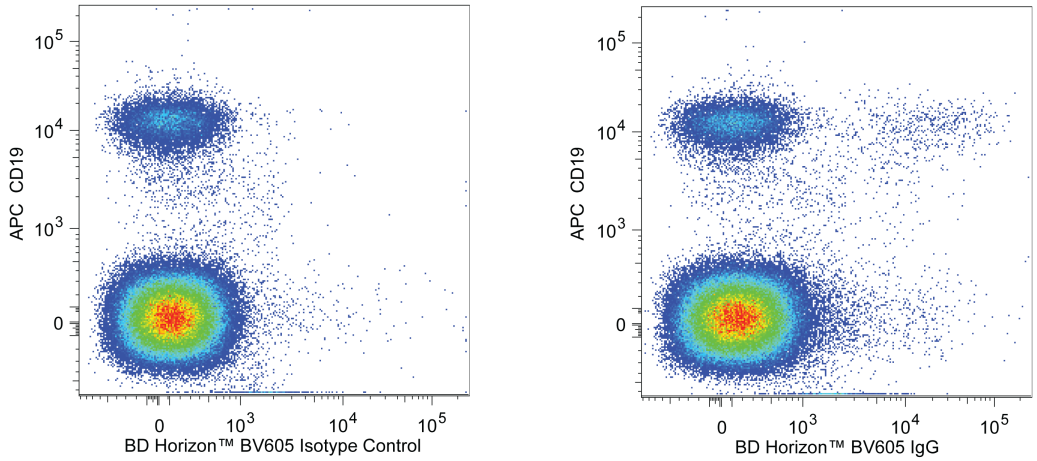
Material Number:	**563246**
Alternate Name:	IGHG1, IGHG2, IGHG3 and IGHG4
Size:	50 Tests
Vol. per Test:	5 µl
Clone:	G18-145
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The G18-145 monoclonal antibody specifically binds to the heavy chain of human immunoglobulin G subclasses: IgG1, IgG2, IgG3 and IgG4. The G18-145 antibody has been reported not to react with the heavy chains of other human immunoglobulin isotypes.

This antibody is conjugated to BD Horizon BV605 which is part of the BD Horizon Brilliant™ Violet family of dyes. With an Ex Max of 407-nm and Em Max of 602-nm, BD Horizon BV605 can be excited by a violet laser and detected with a standard 610/20-nm filter set. BD Horizon BV605 is a tandem fluorochrome of BD Horizon BV421 and an acceptor dye with an Em max at 605-nm. Due to the excitation of the acceptor dye by the green (532 nm) and yellow-green (561 nm) lasers, there will be significant spillover into the PE and BD Horizon PE-CF594 detectors off the green or yellow-green lasers. BD Horizon BV605 conjugates are very bright, often exhibiting brightness equivalent to PE conjugates and can be used as a third color off of the violet laser.

For optimal and reproducible results, BD Horizon Brilliant Stain Buffer should be used anytime two or more BD Horizon Brilliant dyes are used in the same experiment. Fluorescent dye interactions may cause staining artifacts which may affect data interpretation. The BD Horizon Brilliant Stain Buffer was designed to minimize these interactions. More information can be found in the Technical Data Sheet of the BD Horizon Brilliant Stain Buffer (Cat. No. 563794).



Two-color flow cytometric analysis of IgG expression on human peripheral blood lymphocytes. *Human peripheral blood mononuclear cells were washed and cultured in complete tissue culture medium overnight in order to minimize subsequent nonspecific immunofluorescent staining. The cells were harvested and stained with APC Mouse Anti-Human CD19 (Cat. No. 555415/561742) and either BD Horizon™ BV605 Mouse IgG1, κ Isotype Control (Cat. No. 562652; Left Panel) or BD Horizon™ BV605 Mouse Anti-Human IgG antibody (Cat. No. 563246; Right Panel). Two-color flow cytometric dot plots showing the correlated expression of cell surface IgG (or Ig Isotype control staining) versus CD19 were derived from gated events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometric analysis was performed using a BD™ LSR II Flow Cytometer System.*

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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™ BV605 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV605 were removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 mL	(none)
562652	BV605 Mouse IgG1, κ Isotype Control	50 µg	X40
555415	APC Mouse Anti-Human CD19	100 Tests	HIB19
561742	APC Mouse Anti-Human CD19	25 Tests	HIB19
563794	Brilliant Stain Buffer	5 mL	(none)

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10^6 cells in a 100-µl experimental sample (a test).
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
5. 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.
6. 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.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
8. Although every effort is made to minimize the lot-to-lot variation in the efficiency of the fluorochrome energy transfer, differences in the residual emission from BD Horizon™ BV421 may be observed. Therefore, we recommend that individual compensation controls be performed for every BD Horizon™ BV605 conjugate.
9. CF™ is a trademark of Biotium, Inc.

References

Jourdan M, Caraux A, Caron G, et al. Characterization of a transitional preplasmablast population in the process of human B cell to plasma cell differentiation. *J Immunol.* 2011; 187(8):3931-3941. (Clone-specific: Flow cytometry)

Odendahl M, Mei H, Hoyer BF, et al. Generation of migratory antigen-specific plasma blasts and mobilization of resident plasma cells in a secondary immune response. *Blood.* 2005; 105(4):1614-1621. (Clone-specific: Flow cytometry)

Scheeren FA, Naspetti M, Diehl S, et al. STAT5 regulates the self-renewal capacity and differentiation of human memory B cells and controls Bcl-6 expression. *Nat Immunol.* 2005; 6(3):303-313. (Clone-specific: Flow cytometry)

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