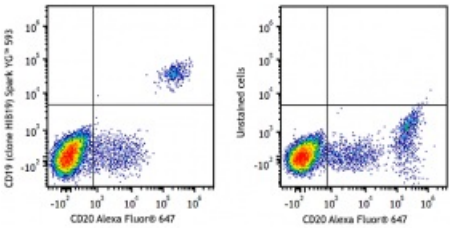
SONY

Product Data Sheet

Spark YG™ 593 anti-human CD19

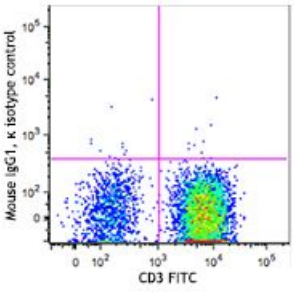
Catalog # / Size:	2111400 / 100 tests 2111395 / 25 tests
Clone:	HIB19
Isotype:	Mouse IgG1, κ
Immunogen:	CX3CR1-EGFP fusion protein
Reactivity:	Human, Other
Preparation:	The antibody was purified by affinity chromatography and conjugated with PE/Fire™ 640 under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)
Workshop Number:	V CD19.11
Concentration:	Lot-specific



Human peripheral blood lymphocytes were stained with CD20 Alexa Fluor® 647 and CD19 (clone HIB19) Spark YG™ 593 (left) or CD20 Alexa Fluor® 647 only (right).

Applications:

Applications:	Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * Spark YG™ 593 has a maximum excitation of 573 nm and a maximum emission of 593 nm.
Application Notes:	Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections[8] and blocking of B cell proliferation. Clone HIB19 is not recommended for formalin-fixed paraffin-embedded sections. The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 302267 & 302268).



Application References:

1. Schlossman S, *et al.* 1995. Leucocyte Typing V. Oxford University Press. New York.
2. Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York.
3. Bradbury L, *et al.* 1993. *J. Immunol.* 151:2915.
4. Joseph A, *et al.* 2010. *J. Virol.* 84:6645. PubMed
5. Wang X, *et al.* 2010. *Haematologica.* 95:884. (FC) PubMed
6. Walker JD, *et al.* 2009. *J. Immunol.* 182:1548. (Block) PubMed
7. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
8. Hansen A, *et al.* 2002. *Arthritis Rheum.* 46:2160. (IHC)
9. Stoeckius M, et al. 2017. Nat. Methods. 14:865. (PG)
10. Peterson VM, et al. 2017. Nat. Biotechnol. 35:936. (PG)

Description: CD19 is a 95 kD type I transmembrane glycoprotein also known as B4. It is a member of the immunoglobulin superfamily expressed on B-cells (from pro-B to blastoid B cells, absent on plasma cells) and follicular dendritic cells. CD19 is involved in B cell development, activation, and differentiation. CD19 forms a complex with CD21 (CR2) and CD81 (TAPA-1), and functions as a BCR co-receptor.

Antigen References:

1. Tedder T, *et al.* 1994. *Immunol. Today* 15:437.
2. Bradbury L, *et al.* 1993. *J. Immunol.* 151:2915.