

## Spark PLUS B550™ anti-human CD19 Antibody

|                          |                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog# / Size</b>   | 390409 / 25 tests<br>390410 / 100 tests                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Clone</b>             | HIB19                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Regulatory Status</b> | RUO                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Workshop</b>          | V CD19.11                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Other Names</b>       | B4                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Isotype</b>           | Mouse IgG1, κ                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Description</b>       | 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. |

### Product Details

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Verified Reactivity</b>    | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Reported Reactivity</b>    | Chimpanzee                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Antibody Type</b>          | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Host Species</b>           | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Formulation</b>            | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Preparation</b>            | The antibody was purified by affinity chromatography and conjugated with Spark PLUS B550™ under optimal conditions.                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Concentration</b>          | Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our <a href="#">Certificate of Analysis</a> online tool.)                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Storage &amp; Handling</b> | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Application</b>            | <a href="#">FC - Quality tested</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Recommended Usage</b>      | Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . 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.<br><br>* Spark PLUS B550™ has a maximum excitation of 516 nm and a maximum emission of 540 nm.                                                             |
| <b>Excitation Laser</b>       | Blue Laser (488 nm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Application Notes</b>      | Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections <sup>9</sup> 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).<br><br>Clone HIB19 partially blocks anti-human CD19 clones 4G7 and SJ25C1 staining based on in-house testing |

## Application References

(PubMed link indicates  
BioLegend citation)

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)

## RRID

AB\_3720552 (BioLegend Cat. No. 390409)  
AB\_3720552 (BioLegend Cat. No. 390410)

## Antigen Details

|                    |                                                                                                                                   |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Structure          | Ig superfamily, type I transmembrane glycoprotein, 95 kD                                                                          |
| Distribution       | B lineage (except plasma cells), follicular dendritic cells                                                                       |
| Function           | B cell activation and differentiation                                                                                             |
| Ligand/Receptor    | Forms complex with CD21 (CR2) and CD81 (TAPA-1), BCR coreceptor                                                                   |
| Cell Type          | B cells, Dendritic cells                                                                                                          |
| Biology Area       | Costimulatory Molecules, Immunology                                                                                               |
| Molecular Family   | CD Molecules                                                                                                                      |
| Antigen References | 1. Tedder T, <i>et al.</i> 1994. <i>Immunol. Today</i> 15:437.<br>2. Bradbury L, <i>et al.</i> 1993. <i>J. Immunol.</i> 151:2915. |
| Gene ID            | <a href="#">930</a>                                                                                                               |

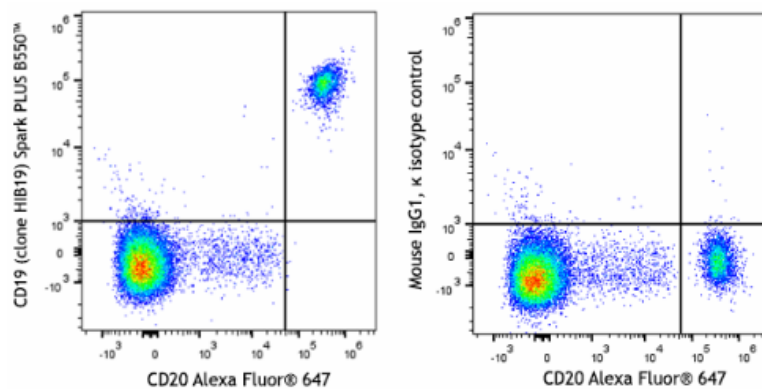
## Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

TotalSeq™-D0050 anti-human CD19, GMP Pacific Blue™ anti-human CD19, KIRAVIA Blue 520™ anti-human CD19, GMP PE/Cyanine7 anti-human CD19, GMP PerCP/Cyanine5.5 anti-human CD19, Spark Violet™ 423 anti-human CD19, PE/Fire™ 810 anti-human CD19, Spark YG™ 593 anti-human CD19, PE/Cyanine5 anti-human CD19, PerCP/Fire™ 806 anti-human CD19, APC/Fire™ 750 anti-human CD19, Alexa Fluor® 660 anti-human CD19, Spark PLUS UV395™ anti-human CD19, GMP PE anti-human CD19, GMP APC anti-human CD19, PE anti-human CD19, PE/Cyanine7 anti-human CD19, Brilliant Violet 605™ anti-human CD19, Brilliant Violet 711™ anti-human CD19, FITC anti-human CD19, Purified anti-human CD19, Spark Violet™ 500 anti-human CD19, Alexa Fluor® 594 anti-human CD19, Brilliant Violet 650™ anti-human CD19, Purified anti-human CD19 (Maxpar® Ready), PE/Fire™ 744 anti-human CD19, Spark UV™ 387 anti-human CD19, GMP APC/Fire™ 750 anti-human CD19, GMP PE/Cyanine5 anti-human CD19, StarBright UltraViolet 575 anti-human CD19, PerCP/Fire™ 780 anti-human CD19, Spark Red™ 718 anti-human CD19, Alexa Fluor® 488 anti-human CD19, Alexa Fluor® 647 anti-human CD19, Spark PLUS B574™ anti-human CD19 Antibody, Spark PLUS B550™ anti-human CD19, GMP FITC anti-human CD19, Spark PLUS B488™ anti-human CD19, Pacific Blue™ anti-human CD19, Alexa Fluor® 700 anti-human CD19, PerCP anti-human CD19, TotalSeq™-B0050 anti-human CD19, APC anti-human CD19, PerCP/Cyanine5.5 anti-human CD19, Spark NIR™ 685 anti-human CD19, Ultra-LEAF™ Purified anti-human CD19, APC/Cyanine7 anti-human CD19, APC/Fire™ 810 anti-human CD19, PE/Fire™ 700 anti-human CD19, Brilliant Violet 785™ anti-human CD19, Brilliant Violet 510™ anti-human CD19, PE/Dazzle™ 594 anti-human CD19, StarBright UltraViolet 795 anti-human CD19, TotalSeq™-A0050 anti-human CD19, TotalSeq™-C0050 anti-human CD19, PE/Fire™ 640 anti-human CD19, Brilliant Violet 421™ anti-human CD19, Biotin anti-human CD19, Brilliant Violet 570™ anti-human CD19, Spark PLUS V475™ anti-human CD19 Antibody, Spark PLUS V450™ anti-human CD19, Brilliant Violet 750™ anti-human CD19

## Product Data



Human peripheral blood lymphocytes were stained with anti-human CD20 (clone 2H7) Alexa Fluor® 647 and anti-human CD19 (clone HIB19) Spark PLUS B550™ (left) or mouse IgG1, κ Spark PLUS B550™ isotype control (right).

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