

## TotalSeq™-A0154 anti-human CD27 Antibody

|                          |  |
|--------------------------|--|
| <b>Catalog# / Size</b>   | 302847 / 10 µg   |
| <b>Clone</b>             | O323   |
| <b>Regulatory Status</b> | RUO  |
| <b>Workshop</b>          | IV T-186   |
| <b>Other Names</b>       | S152, T14, TNFRSF7   |
| <b>Isotype</b>           | Mouse IgG1, κ  |
| <b>Barcode Sequence</b>  | GCACTCCTGCATGTA  |
| <b>Description</b>       | CD27 is a 50-55 kD type I membrane protein also known as S152 and T14. It is a lymphocyte-specific member of the TNF-receptor superfamily. CD27 is expressed on medullary thymocytes, virtually all mature T cells, some B cells, and NK cells. CD27 binds to CD70 and plays an important role in costimulation of T cell activation, and regulation of B cell differentiation and proliferation. The cytoplasmic domains of CD27 have also been shown to interact with TRAF2 and TRAF5 to elicit NF-κB and SAPK/JNK activation. |

### Product Details

---

|                                 |   |
|---------------------------------|---|
| <b>Verified Reactivity</b>      | Human, Cynomolgus, Rhesus   |
| <b>Reported Reactivity</b>      | African Green, Baboon, Squirrel Monkey  |
| <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 1 mM EDTA.   |
| <b>Preparation</b>              | The antibody was purified by chromatography and conjugated with TotalSeq™-A oligomer under optimal conditions.  |
| <b>Concentration</b>            | 0.5 mg/ml   |
| <b>Storage &amp; Handling</b>   | The antibody solution should be stored undiluted between 2°C and 8°C. <b>Do not freeze.</b>   |
| <b>Application</b>              | <a href="#">PG - Quality tested</a>   |
| <b>Recommended Usage</b>        | <p>Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> and the oligomer sequence is confirmed by sequencing. TotalSeq™-A antibodies are compatible with 10x Genomics Single Cell Gene Expression <a href="#">Solutions</a>.</p> <p>To maximize performance, it is strongly recommended that the reagent be titrated for each application, and that you centrifuge the antibody dilution before adding to the cells at 14,000xg at 2 - 8°C for 10 minutes. Carefully pipette out the liquid avoiding the bottom of the tube and add to the cell suspension. For Proteogenomics analysis, the suggested starting amount of this reagent for titration is ≤ 1.0 µg per million cells in 100 µL volume. Refer to the corresponding TotalSeq™ protocol for specific staining instructions.</p> <p>Buyer is solely responsible for determining whether Buyer has all intellectual property rights that are necessary for Buyer's intended uses of the BioLegend TotalSeq™ products. For example, for any technology platform Buyer uses with TotalSeq™, it is Buyer's sole responsibility to determine whether it has all necessary third party intellectual property rights to use that platform and TotalSeq™ with that platform.</p> |
| <b>Additional Product Notes</b> | <p>TotalSeq™ reagents are designed to profile protein levels at a single cell level following an optimized protocol similar to the CITE-seq workflow. A compatible single cell device (e.g. <a href="#">10x Genomics Chromium System and Reagents</a>) and sequencer (e.g. Illumina analyzers) are required. Please contact <a href="#">technical support</a> for more information, or visit <a href="http://biolegend.com/totalseq">biolegend.com/totalseq</a>.</p> <p>The barcode flanking sequences are CCTTGGCACCCGAGAATTCCA (PCR handle), and BAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA*A*A (capture sequence). B represents either C, G, or</p>  |

T, and \* indicates a phosphorothioated bond, to prevent nuclease degradation.

View more applications data for this product in our [Scientific Poster Library](#).

#### Application References

(PubMed link indicates BioLegend citation)

1. Knapp W, *et al.* Eds. 1989. Leucocyte Typing IV. Oxford University Press. New York.
2. Correia DV, *et al.* 2011. *Blood* 118:992. (FC) [PubMed](#)

#### Product Citations

1. Stuart T, *et al.* 2019. *Cell*. 177:1888. [PubMed](#)
2. Hao Y, *et al.* 2021. *Cell*. 184:3573. [PubMed](#)

#### RRID

AB\_2750000 (BioLegend Cat. No. 302847)

## Antigen Details

---

|                           |  |
|---------------------------|--|
| <b>Structure</b>          | TNF-R superfamily, type I transmembrane glycoprotein, 50-55 kD   |
| <b>Distribution</b>       | Medullary thymocytes, T and B cell subsets, NK cells   |
| <b>Function</b>           | T cell costimulation   |
| <b>Ligand/Receptor</b>    | CD70   |
| <b>Cell Type</b>          | B cells, NK cells, T cells, Thymocytes, Tregs  |
| <b>Biology Area</b>       | Costimulatory Molecules, Immunology  |
| <b>Molecular Family</b>   | CD Molecules   |
| <b>Antigen References</b> | 1. Hintzen R, <i>et al.</i> 1994. <i>Immunol. Today</i> 15:307.<br>2. Agematsu K, <i>et al.</i> 1995. <i>J. Immunol.</i> 154:3627. |
| <b>Gene ID</b>            | <a href="#">939</a>  |

## Related Protocols

---

[TotalSeq™-A Antibodies and Cell Hashing with 10x Single Cell 3' Reagent Kit v3 3.1 Protocol](#)

## Other Formats

---

APC anti-human CD27, Biotin anti-human CD27, FITC anti-human CD27, PE anti-human CD27, Purified anti-human CD27, Alexa Fluor® 647 anti-human CD27, Alexa Fluor® 700 anti-human CD27, APC/Cyanine7 anti-human CD27, PerCP anti-human CD27, PerCP/Cyanine5.5 anti-human CD27, Pacific Blue™ anti-human CD27, Brilliant Violet 421™ anti-human CD27, Brilliant Violet 570™ anti-human CD27, Brilliant Violet 650™ anti-human CD27, Brilliant Violet 605™ anti-human CD27, Brilliant Violet 711™ anti-human CD27, Brilliant Violet 785™ anti-human CD27, Brilliant Violet 510™ anti-human CD27, PE/Cyanine7 anti-human CD27, Purified anti-human CD27 (Maxpar® Ready), PE/Dazzle™ 594 anti-human CD27, APC/Fire™ 750 anti-human CD27, TotalSeq™-A0154 anti-human CD27, Brilliant Violet 750™ anti-human CD27, TotalSeq™-B0154 anti-human CD27, TotalSeq™-C0154 anti-human CD27, Spark NIR™ 685 anti-human CD27, PE/Fire™ 810 anti-human CD27, TotalSeq™-D0154 anti-human CD27, APC/Fire™ 810 anti-human CD27, PE/Cyanine5 anti-human CD27 Antibody, Spark UV™ 387 anti-human CD27

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

