

## TotalSeq™-B1028 anti-mouse CD104 Antibody

|                          |  |
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| <b>Catalog# / Size</b>   | 123619 / 10 µg   |
| <b>Clone</b>             | 346-11A  |
| <b>Regulatory Status</b> | RUO  |
| <b>Other Names</b>       | Integrin β4, β4 integrin, TSP-1180, ITGB4  |
| <b>Isotype</b>           | Rat IgG2a, κ   |
| <b>Barcode Sequence</b>  | GTGATCCCTGGTATT  |
| <b>Description</b>       | CD104 is a 205 kD type I transmembrane glycoprotein, also known as integrin β4 chain or β4 integrin, that associates with integrin α6 (CD49f) to form the α6/β4 (CD49f/CD104) heterodimer. CD104 is expressed on epithelial cells (especially on proliferative basal layer epithelial cells in skin), endothelial cells, Schwann cells, certain tumor cells, and a subset of pre-T cells. The CD49f/CD104 heterodimer is an adhesion receptor for laminins (especially laminin 5) and keratin filaments, and is involved in the regulation of hemidesmosome formation and cell proliferation and activation. |

### Product Details

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| <b>Verified Reactivity</b>      | Mouse   |
| <b>Antibody Type</b>            | Monoclonal  |
| <b>Host Species</b>             | Rat   |
| <b>Immunogen</b>                | Tumor-associated antigen TSP-180 from BALB/c lung carcinoma   |
| <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™-B 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™-B 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>Application Notes</b>        | Additional reported (for the relevant formats) applications include: immunohistochemical staining <sup>1</sup> .  |
| <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</p>  |

GTGACTGGAGTTTCAGACGTGTGCTCTTCCGATCTNNNNNNNNNN (PCR handle), and NNNNNNNNGCTTTAAGGCCGGTCCTAGC\*A\*A (capture sequence). N represents either randomly selected A, C, G, or 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. Tennenbaum T, *et al.* 1993. *Cancer Res.* 53:4803. (IHC)

RRID AB\_2892279 (BioLegend Cat. No. 123619)

## Antigen Details

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| <b>Structure</b>          | Integrin $\beta$ chain, 205 kD, forms heterodimer with integrin $\alpha 6$ (CD49f) |
| <b>Distribution</b>       | Epithelial cells, endothelial cells, some tumor cells, pre-T cell subset           |
| <b>Function</b>           | Adhesion   |
| <b>Ligand/Receptor</b>    | Laminins, keratin filaments  |
| <b>Cell Type</b>          | Embryonic Stem Cells, Endothelial cells, Epithelial cells, T cells                 |
| <b>Biology Area</b>       | Cell Adhesion, Cell Biology, Immunology, Stem Cells                                |
| <b>Molecular Family</b>   | Adhesion Molecules, CD Molecules   |
| <b>Antigen References</b> | 1. Kennel SJ, <i>et al.</i> 1992. <i>J. Cell Sciences</i> 101:1992.                |
| <b>Gene ID</b>            | <a href="#">192897</a>   |

## Related Protocols

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[TotalSeq™-B or -C with 10x Feature Barcoding Technology](#)

## Other Formats

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Purified anti-mouse CD104, Biotin anti-mouse CD104, FITC anti-mouse CD104, Alexa Fluor® 647 anti-mouse CD104, PE anti-mouse CD104, PerCP/Cyanine5.5 anti-mouse CD104, PE/Cyanine7 anti-mouse CD104, APC anti-mouse CD104, TotalSeq™-C1028 anti-mouse CD104, TotalSeq™-B1028 anti-mouse CD104

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