

## TotalSeq™-B0564 anti-mouse Folate Receptor $\beta$ (FR- $\beta$ ) Antibody

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|--------------------------|--|
| <b>Catalog# / Size</b>   | 153309 / 10 $\mu$ g  |
| <b>Clone</b>             | 10/FR2   |
| <b>Regulatory Status</b> | RUO  |
| <b>Other Names</b>       | FR- $\beta$  |
| <b>Isotype</b>           | Rat IgG2a, $\kappa$  |
| <b>Barcode Sequence</b>  | CTCAGATGCCCTTTA  |
| <b>Description</b>       | Folate receptor beta (FR- $\beta$ ) is a member of a family of folate binding receptors that have diverse structural identities but mediate transport of folates into cells. FR- $\beta$ is a GPI-anchored protein with high affinity for folic acid. It is postulated that this receptor function as folate scavengers when folate supply is low or rapid cell growth requires elevated uptake of folate for methylation reactions including DNA biosynthesis. Although this protein was originally thought to be specific to placenta, it can also exist in other tissues, and it may play a role in the transport of methotrexate in synovial macrophages in rheumatoid arthritis patients. |

### Product Details

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| <b>Verified Reactivity</b>      | Mouse  |
| <b>Antibody Type</b>            | Monoclonal   |
| <b>Host Species</b>             | Rat  |
| <b>Immunogen</b>                | Mouse Folate receptor $\beta$ transfected cells  |
| <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 <math>\leq 1.0 \mu</math>g per million cells in 100 <math>\mu</math>L 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 GTGACTGGAGTTCAGACGTGTGCTCTCCGATCTNNNNNNNNNN (PCR handle), and NNNNNNNNGCTTTAAGGCCGGTCCTAGC*A*A (capture sequence). N represents either</p>  |

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. Nagai T, *et al.* 2009. *Cancer Immunol Immunother.* 1577-86.

RRID AB\_2876511 (BioLegend Cat. No. 153309)

## Antigen Details

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|                           |   |
|---------------------------|---|
| <b>Structure</b>          | 30 kD, seven disulfide bonds  |
| <b>Distribution</b>       | Placenta, monocytes, tissue resident macrophages  |
| <b>Function</b>           | Transport of folate into cells  |
| <b>Ligand/Receptor</b>    | Folic Acid  |
| <b>Cell Type</b>          | Macrophages, Monocytes  |
| <b>Antigen References</b> | <ol style="list-style-type: none"><li>1. Elwood PC, 1989, <i>J Biol Chem</i>, 264:14893.</li><li>2. Shen F, et al, 1994, <i>Biochemistry</i>, 8;33:1209.</li><li>3. Yi YS, 2016, <i>Immune Netw</i>,16:337.</li></ol> |
| <b>Gene ID</b>            | <a href="#">14276</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 Folate Receptor  $\beta$  (FR- $\beta$ ), APC anti-mouse Folate Receptor  $\beta$  (FR- $\beta$ ), PE anti-mouse Folate Receptor  $\beta$  (FR- $\beta$ ), TotalSeq™-A0564 anti-mouse Folate Receptor  $\beta$  (FR- $\beta$ ), TotalSeq™-B0564 anti-mouse Folate Receptor  $\beta$  (FR- $\beta$ ) Antibody

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