

TotalSeq[™]-A0252 anti-human Hashtag 2 Antibody

Catalog# / Size	394603 / 10 µg
Clone	LNH-94; 2M2 (See other available formats)
Other Names	Na ⁺ /K ⁺ ATPase β3, ATP1B3, β2M, β2-M, beta2-microglobulin b2-M, b2M
Isotype	Mouse IgG1, κ (all clones)
Description	<p>TotalSeq[™] anti-human Hashtag reagents are designed to label most human cells, using a combination of two clones that recognize CD298 and β2 microglobulin, respectively. The antibodies are conjugated to the same oligonucleotide, pre-mixed to be used following an optimized protocol similar to the CITE-seq workflow.</p> <p>β2-microglobulin (β2M) is a 12 kD nonpolymorphic Ig like protein. It is a non-membrane-anchored glycoprotein and is noncovalently associated with 39-44 kD polymorphic heavy chains of MHC class I molecules to form HLA class I antigen complex. In association with HLA class I, β2M is expressed on all leukocytes, platelets, endothelial cells, and epithelial cells. β2M plays an essential role both in governing MHC class I molecules stability and in promoting antigen binding and presenting the antigen to CD3/TCR complex of CD8⁺ T cells.</p> <p>CD298 or the β3 Na⁺/K⁺ ATPase, is a 42 kD type II transmembrane protein, also known as ATP1B3. An integral plasma membrane protein, Na⁺/K⁺ ATPase is composed of one α and one β subunits. Four isoforms of the α and three isoforms of the β subunits have been reported. Na⁺/K⁺ ATPase couples ATP hydrolysis to the development of an ionic gradient by pumping Na⁺ and K⁺ ions in opposite directions across the cell plasma membrane. It has broad tissue distribution, including all leukocytes and many other tissues.</p>

Product Details

Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 1 mM EDTA.
Preparation	The antibody was purified by chromatography and conjugated with TotalSeq [™] -A oligomer under optimal conditions. The solution is free of unconjugated DNA and unconjugated antibody.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. Do not freeze.
Application	PG - <i>Quality tested</i>
Recommended Usage	<p>Each lot of this reagent is quality control tested by immunofluorescent staining with flow cytometric analysis and the oligomer sequence is confirmed by sequencing. For Proteogenomics TotalSeq[™]-A analysis, the suggested use of this reagent is 0.1 to 1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>To maximize performance, centrifuge the antibody dilution (0.1 - 1.0 µg of antibody in 100 µl of staining buffer for every 1 million cells) 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. It is also recommended that users test the reactivity of the reagents to their target cells of interest before actual studies.</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>
Additional Product Notes	<p>Hashtag reagents require different primers than regular TotalSeq[™] antibodies. Please refer to the protocol for details.</p> <p>TotalSeq[™] Hashtag reagents can be used for multiplexing different samples; optimization of microfluidics instruments to load a high number of cells, and discriminate droplets containing more than one cell; performing TotalSeq[™] antibody titrations, etc. A compatible single cell device (e.g. 10x Genomics Chromium System and Reagents) and sequencer (e.g. Illumina analyzers) are required. Please contact technical support for more information, or visit biolegend.com/totalseq.</p> <p>The barcode sequence associated with anti-human Hashtag 2 is TGATGGCCTATTGGG.</p>

The flanking sequences are GTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT, and the capture sequence, BAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA*A*A, B represents either C, G, or T, and * indicates a phosphorothioated bond, to prevent nuclease degradation.

The full oligomer sequence for this product, with the specific barcode in brackets is GTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT [TGATGGCCTATTGGG]BAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA*A*A.

RRID AB_2750016 (BioLegend Cat. No. 394603)

Antigen Details

Gene ID 483
567

Related Protocols

[TotalSeq™-A Antibodies Protocol for Simultaneous Proteomics and Transcriptomics with 10X Single Cell 3' Reagent Kit v2](#)

[TotalSeq™-A Cell Hashing and TotalSeq™-A Antibodies Protocol for Simultaneous Proteomics and Transcriptomics with 10X Single Cell 3' Reagent Kit v2](#)

Other Formats

TotalSeq™-A0251 anti-human Hashtag 1, TotalSeq™-A0253 anti-human Hashtag 3, TotalSeq™-A0254 anti-human Hashtag 4, TotalSeq™-A0255 anti-human Hashtag 5, TotalSeq™-A0256 anti-human Hashtag 6, TotalSeq™-A0257 anti-human Hashtag 7, TotalSeq™-A0258 anti-human Hashtag 8, TotalSeq™-A0259 anti-human Hashtag 9, TotalSeq™-A0260 anti-human Hashtag 10, TotalSeq™-A0262 anti-human Hashtag 12, TotalSeq™-A0263 anti-human Hashtag 13, TotalSeq™-A0264 anti-human Hashtag 14, TotalSeq™-A0265 anti-human Hashtag 15, TotalSeq™-C0251 anti-human Hashtag 1, TotalSeq™-C0252 anti-human Hashtag 2, TotalSeq™-C0253 anti-human Hashtag 3, TotalSeq™-C0254 anti-human Hashtag 4, TotalSeq™-C0255 anti-human Hashtag 5

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