Alexa Fluor® 488 Mouse Anti-Human Aiolos

Product Information

Material Number: 565216
Alternate Name: AIOLOS; AIO; IKZF3; ZNFN1A3
Size: 50 Tests
Vol. per Test: 5 µl
Clone: S50-895
Immunogen: Human Aiolos Recombinant Protein
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description
The S50-895 monoclonal antibody specifically recognizes the transcription factor, Aiolos, which is encoded by IKZF3, IKAROS family zinc finger 3. Aiolos belongs to the Ikaros family of zinc-finger proteins that includes Ikaros and Helios. Aiolos can form homodimers or heterodimers with other Ikars family members. Multiple Aiolos isoforms have been described. Aiolos is expressed in committed lymphoid progenitors and mature types of T and B lymphocytes, but is not expressed by hematopoietic stem cells. Aiolos plays an important role in the control of B lymphocyte differentiation and proliferation and is specifically required for the generation of long-lived, high affinity plasma cells in the bone marrow. Aiolos is involved in regulating BCL2 expression and controlling apoptosis in T-cells in an IL2-dependent manner. Aberrant expression of IKZF3 has been implicated with leukemogenesis and certain autoimmune diseases.

Preparation and Storage
Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
The antibody was conjugated to Alexa Fluor® 488 under optimum conditions, and unreacted Alexa Fluor® 488 was removed.

Application Notes

Application

Intracellular staining (flow cytometry) Routinely Tested

Multicolor flow cytometric analysis of Aiolos expression in human peripheral blood lymphocytes. Human whole blood was treated with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899) to lyse erythrocytes. The leucocytes were washed and then stained with APC Mouse Anti-Human CD3 antibody (Cat. No. 555335/561810/561811; Left Panels) and PerCP-Cy™5.5 Mouse Anti-human CD19 antibody (Cat. No. 340951; Right Panels). The cells were subsequently fixed and permeabilized with the BD Pharmingen™ Transcription Factor Buffer Set (Cat. No. 562574/562725) and stained with either Alexa Fluor® 488 Mouse IgG1, κ Isotype Control (Cat. No. 557721; Lower Panels) or Alexa Fluor® 488 Mouse Anti-Human Aiolos antibody (Cat. No. 565216; Upper Panels). Two-color flow cytometric contour plots showing the correlated expression of Aiolos (or Ig Isotype control staining) versus CD3 or CD19 were derived from gated events with the forward and side-light scattering characteristics of intact lymphocytes. Flow cytometric analysis was performed using a BD™ LSR II Flow Cytometer System.
**Suggested Companion Products**

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**Product Notices**

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use $1 \times 10^6$ cells in a 100-µl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
5. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
6. Alexa Fluor® 488 fluorochrome emission is collected at the same instrument settings as for fluorescein isothiocyanate (FITC).
7. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
8. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

**References**


